

chain nodes :

13 14 16 17 23 24 25 26 27 28 29 33 35 36 40 41 44 45 46 47 48 49  
50 51 62 63 64 65 69 70 71 72

ring nodes :

1 2 3 4 5 6 7 8 9 10 11 12

ring/chain nodes :

18

chain bonds :

4-13 7-13 10-33 13-14 16-17 17-18 23-25 26-28 27-28 28-29 44-45 45-46 46-50  
47-48 48-49 49-51 62-63 63-64 64-65 69-70 70-71 71-72

ring bonds :

1-2 1-6 2-3 3-4 4-5 5-6 7-8 7-12 8-9 9-10 10-11 11-12

exact/norm bonds :

7-8 7-12 7-13 8-9 9-10 10-11 10-33 11-12 13-14 23-25 26-28 27-28 28-29 46-50  
49-51

exact bonds :

4-13 16-17 17-18 44-45 45-46 47-48 48-49 62-63 63-64 64-65 69-70 70-71 71-72

normalized bonds :

1-2 1-6 2-3 3-4 4-5 5-6

isolated ring systems :

containing 1 : 7 :

G1:O,S

G2:CH3,Et,n-Pr,i-Pr,n-Bu,i-Bu,s-Bu,t-Bu, [\*1], [\*2], [\*3], [\*4], [\*5], [\*6], [\*7]

G3:CH3,Et,CF3,MeO,EtO,n-PrO,i-PrO,X,H,NO2

Match level :

1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:Atom 8:Atom 9:Atom 10:Atom 11:Atom  
12:Atom 13:CLASS 14:CLASS 16:CLASS 17:CLASS 18:CLASS 21:CLASS 23:Atom 24:Atom  
25:CLASS

	26:CLASS	27:CLASS	28:CLASS	29:CLASS	33:CLASS	35:CLASS	36:CLASS	38:CLASS
39:CLASS	40:CLASS	41:CLASS	42:CLASS	43:CLASS	44:CLASS	45:CLASS	46:CLASS	47:CLASS
48:CLASS	49:CLASS	50:CLASS	51:CLASS	62:CLASS	63:CLASS	64:CLASS	65:CLASS	69:CLASS
70:CLASS	71:CLASS	72:CLASS						

Generic attributes :

23:	
Saturation	: Saturated
24:	
Saturation	: Saturated

10/690,115

=> d his

(FILE 'HOME' ENTERED AT 13:02:09 ON 16 MAY 2006)

FILE 'REGISTRY' ENTERED AT 13:02:18 ON 16 MAY 2006

L1               STRUCTURE UPLOADED

L2               27 S L1

L3               STRUCTURE UPLOADED

L4               7 S L3

L5               251 S L3 SSS FUL

FILE 'CAPLUS' ENTERED AT 13:34:48 ON 16 MAY 2006

L6               50 S L5

=> d ibib abs hitstr total

L6 ANSWER 1 OF 50 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2006:318485 CAPLUS

DOCUMENT NUMBER: 144:370081

TITLE: Carbostyryl compounds and their preparation,  
pharmaceutical compositions, and their transcription  
promoting activity of TFF2 for treatment and/or  
prevention of various diseasesINVENTOR(S): Kuroda, Takeshi; Yamauchi, Takahito; Shinohara,  
Tomoichi; Oshima, Kunio; Kitajima, Chiharu; Nagao,  
Hitoshi; Fukushima, Tae; Tomoyasu, Takahiro; Ishiyama,  
Hironobu; Ohta, Kazuhide; Takano, Masaaki; Sumida,  
Takumi

PATENT ASSIGNEE(S): Otsuka Pharmaceutical Co., Ltd., Japan

SOURCE: PCT Int. Appl., 468 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2006035954	A1	20060406	WO 2005-JP18217	20050926
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW			
RW:	AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			

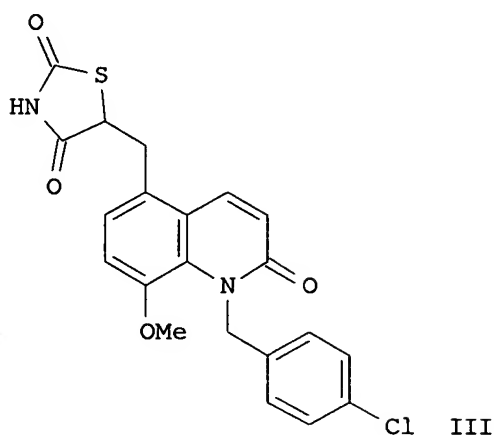
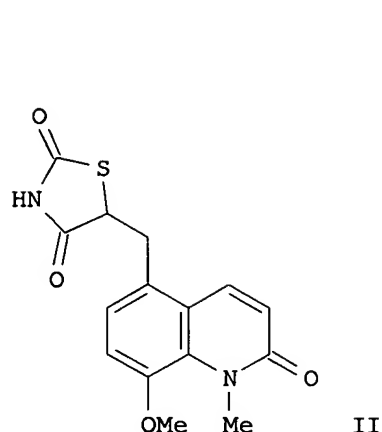
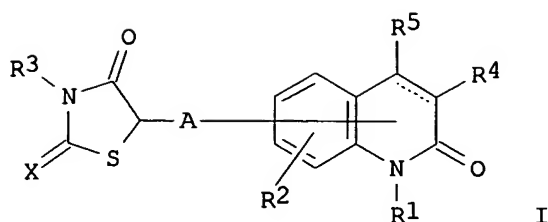
PRIORITY APPLN. INFO.:

JP 2004-282814

A 20040928

GI





AB The invention provides carbostyryl compds. represented by formula I or salts thereof, and their pharmaceutical compns., preps. and use for transcription promotion activity of TFF2. The carbostyryl compds. or salts thereof, of the invention, induces the production of TFF, and thus is usable for the treatment and/or prevention of disorders such as alimentary tract diseases, oral diseases, upper respiratory tract diseases, respiratory tract diseases, eye diseases, cancers, and wounds. Compds. of formula I wherein A is a bond, a lower alkylene group, or a lower alkylidene group; X is O or S; the dotted line is a single or a double bond; R4 and R5 are independently H, with the provision that dotted line is a double bond; or R4-R5 may be linked together to form a CH=CH-CH=CH group; R1 is H, lower alkyl, (un)substituted Ph lower alkyl, cycloalkyl lower alkyl, phenoxy lower alkyl, naphthyl lower alkyl, lower alkoxy lower alkyl, carboxyl lower alkyl, lower alkoxy carbonyl lower alkyl, (un)substituted pyridyl lower alkyl, cyano lower alkyl, etc.; R2 is H, lower alkoxy, lower alkyl, carboxy lower alkyl, lower alkoxy carbonyl lower alkoxy, HO, (un)substituted Ph lower alkoxy, (un)substituted piperidinyl(oxy) lower alkyl, lower alkenyloxy, (un)substituted pyridyl lower alkoxy, lower alkynyloxy, Ph lower alkenyloxy, Ph lower alkynyloxy, (un)substituted furyl lower alkoxy, (un)substituted oxadiazolyl lower alkyl, or (un)substituted thiazolyl lower alkoxy, etc.; R3 is H, lower (HO-substituted) alkyl, cycloalkyl lower alkyl, carboxyl lower alkyl, lower alkoxy carbonyl lower alkyl, (un)substituted Ph lower alkyl, naphthyl lower alkyl, (un)substituted furyl lower alkyl, (un)substituted thiazolyl lower alkyl, (un)substituted tetrazolyl, or (un)substituted benzothienyl, etc.; and their pharmaceutically acceptable salts are claimed. Example compound II was prepared by heterocyclization of 2-chloro-3-(8-methoxy-1-methyl-2-oxo-1,2-dihydroquinolin-5-yl)propionic acid with thiourea. All the invention compds. were evaluated for the transcription promoting

activity of hTFF2. From the assay, it was determined that some invention compds., including compound III, showed TFF2 production activity of 1000% or higher at a test compound concentration of 10<sup>-6</sup>M concentration. Some invention compds.

showed a TFF2 production promoting activity of 300% or higher at a test compound

concentration is less than 10<sup>-5</sup>M and preferably more than 10<sup>-6</sup>M. Example compound

III and a few other compds. showed >20% healing ratio of the ulcerated area, which indicated that these compds. may be effective in preventing and/or treating mucosal injury.

IT **882010-51-7P 882010-54-0P 882010-55-1P**

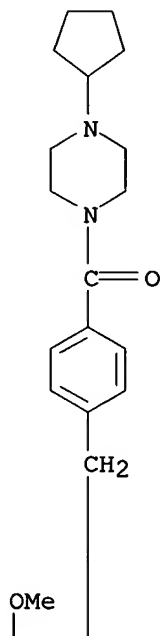
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(drug candidate; preparation of carbostyryl compds. and their transcription promoting activity of TFF2 for treatment and/or prevention of various diseases)

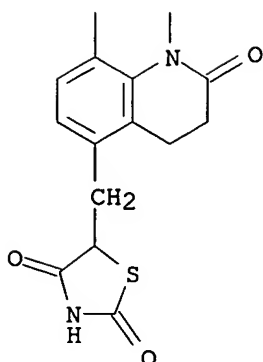
RN 882010-51-7 CAPLUS

CN Piperazine, 1-cyclopentyl-4-[4-[[5-[(2,4-dioxo-5-thiazolidinyl)methyl]-3,4-dihydro-8-methoxy-2-oxo-1(2H)-quinolinyl]methyl]benzoyl]- (9CI) (CA INDEX NAME)

PAGE 1-A



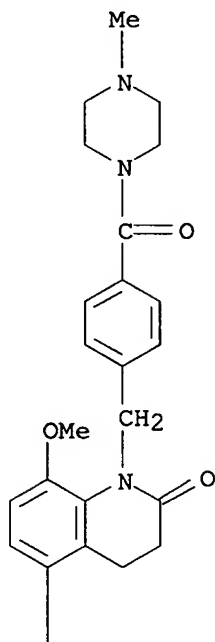
PAGE 2-A

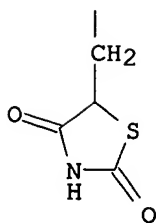


RN 882010-54-0 CAPLUS

CN Piperazine, 1-[4-[[5-[(2,4-dioxo-5-thiazolidinyl)methyl]-3,4-dihydro-8-methoxy-2-oxo-1(2H)-quinolinyl]methyl]benzoyl]-4-methyl- (9CI) (CA INDEX NAME)

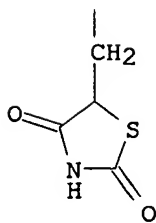
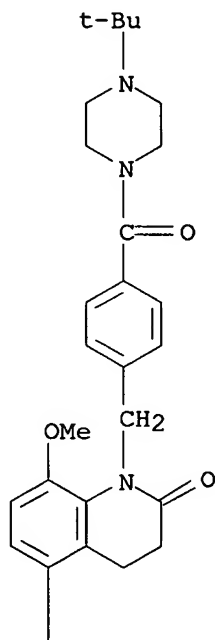
PAGE 1-A





RN 882010-55-1 CAPLUS

CN Piperazine, 1-(1,1-dimethylethyl)-4-[4-[[5-[(2,4-dioxo-5-thiazolidinyl)methyl]-3,4-dihydro-8-methoxy-2-oxo-1(2H)-quinolinyl]methyl]benzoyl]- (9CI) (CA INDEX NAME)



10/690,115

REFERENCE COUNT:

11      THERE ARE 11 CITED REFERENCES AVAILABLE FOR THIS  
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

16 ANSWER 2 OF 50 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2006:211323 CAPLUS

DOCUMENT NUMBER: 144:292780

TITLE: Preparation of novel substituted fused imidazole derivatives as polo-like kinase 1 (PLK1) inhibitors and anticancer drugs

INVENTOR(S): Kawamura, Mikako; Hashihayata, Takashi; Sunami, Satoshi; Sugimoto, Tetsuya; Yamamoto, Fuyuki; Sato, Yoshiyuki; Kamiyo, Kaori; Mitsuya, Morihiro; Iwasawa, Yoshikazu; Komatani, Hideya

PATENT ASSIGNEE(S): Banyu Pharmaceutical Co., Ltd., Japan

SOURCE: PCT Int. Appl., 205 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

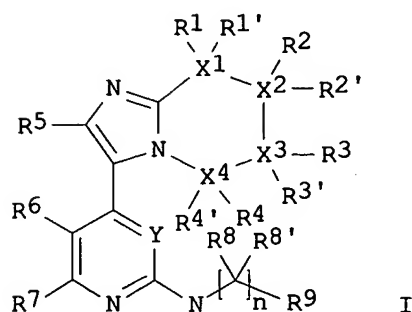
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2006025567	A1	20060309	WO 2005-JP16187	20050830
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				

PRIORITY APPLN. INFO.:

JP 2004-251500

A 20040831

GI



AB Comps. represented by the general formula (I) or pharmaceutically acceptable salts or esters thereof [X1-X4 = C or N, provided that 0-2 of X1-X4 is N; Y = CH or N; R1, R1', R2, R2', R3, R3', R4, R4' = H, halo, HO, NO<sub>2</sub>, cyano, NH<sub>2</sub>, CONH<sub>2</sub>, SO<sub>2</sub>NH<sub>2</sub>, lower alkyl amino, hydroxy-lower alkyl, di(lower alkyl)amino, imino, lower alkylsulfonyl, lower

alkylsulfonylamino, halo-(un)substituted lower alkoxy, lower alkoxy carbonyl, lower alkoxy carbonylamino, CO<sub>2</sub>H, (un)substituted lower alkyl, cycloalkyl, aryl, or heteroaryl, etc.; R<sub>8</sub>, R<sub>8</sub>' = H, (un)substituted lower alkyl; R<sub>9</sub> = (un)substituted aryl or heteroaryl; n = an integer of 1-3] are prepared Polo-like kinase 1 (PLK1) inhibitors and anticancer drugs containing the compds. I as the active ingredients are disclosed. These compds. inhibit the proliferation of tumor cells based on the inhibition of PLK1 and exhibit antitumor activity. Thus, 6.0 mg 4-(8-methylimidazo[1,2-a]pyridin-3-yl)-2-([(1S)-1-phenylethyl]amino)-5-pyrimidinecarboxamide was dissolved in 1 mL pyridine, treated with 3.0 µL phosphorus oxychloride, and stirred at room temperature for 30 min to give, after workup and purification using TLC, 4.0 mg 4-(8-methylimidazo[1,2-a]pyridin-3-yl)-2-([(1S)-1-phenylethyl]amino)-5-pyrimidinecarbonitrile (II). II showed IC<sub>50</sub> of 43 and 26 nM against human PLK1 and mutant PLK1 (PLK1-T210D), resp. 4-(8-Methoxyimidazo[1,2-a]pyridin-3-yl)-2-([(1S)-1-[4-(piperazin-1-yl)phenyl]ethyl]amino]pyrimidine-5-carbonitrile showed EC<sub>50</sub> of 0.18 µM against human cervical cancer cell HeLaS3.

IT 878804-00-3P, 4-[8-(Difluoromethyl)imidazo[1,2-a]pyridin-3-yl]-2-[[[(1S)-1-[3-[(4-methylpiperazin-1-yl)carbonyl]phenyl]ethyl]amino]pyrimidin-5-carbonitrile

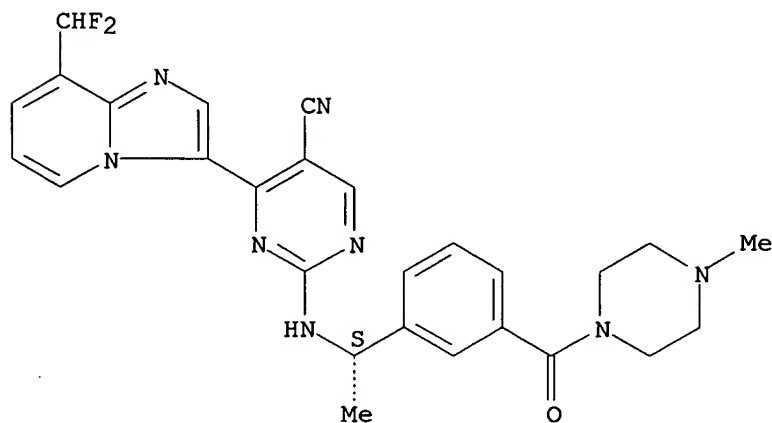
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of substituted fused imidazole derivs. as polo-like kinase 1 inhibitors and anticancer agents)

RN 878804-00-3 CAPLUS

CN Piperazine, 1-[3-[(1S)-1-[[5-cyano-4-[8-(difluoromethyl)imidazo[1,2-a]pyridin-3-yl]-2-pyrimidinyl]amino]ethyl]benzoyl]-4-methyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



REFERENCE COUNT:

19

THERE ARE 19 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

10/690,115

L6 ANSWER 3 OF 50 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2005:572592 CAPLUS

DOCUMENT NUMBER: 143:97378

TITLE: Preparation of azabicyclic heterocycles as cannabinoid receptor modulators

INVENTOR(S): Yu, Guixue; Ewing, William R.; Mikkilineni, Amarendra B.; Pendri, Annapurna; Sher, Philip M.; Gerritz, Samuel; Ellsworth, Bruce A.; Wu, Gang; Huang, Yanting; Sun, Chongqing; Murugesan, Natesan; Gu, Zhengxiang; Wang, Ying; Sitkoff, Doree; Johnson, Stephen R.; Wu, Ximao

PATENT ASSIGNEE(S): USA

SOURCE: U.S. Pat. Appl. Publ., 196 pp.

CODEN: USXXCO

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2005143381	A1	20050630	US 2004-16135	20041217
WO 2005063761	A1	20050714	WO 2004-US42820	20041217
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW			
RW:	BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG			
US 2005192278	A1	20050901	US 2004-15876	20041217
US 7037910	B2	20060502		
WO 2005061509	A1	20050707	WO 2004-US42542	20041220
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW			
RW:	BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG			

PRIORITY APPLN. INFO.:

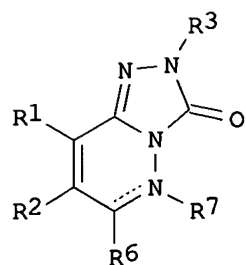
US 2003-531451P P 20031219

US 2004-16135 A 20041217

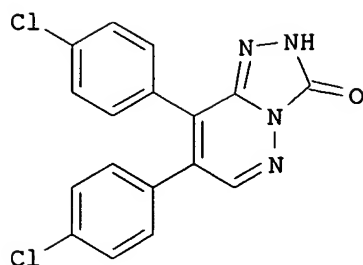
OTHER SOURCE(S): MARPAT 143:97378

GI





I



II

AB The present application describes compds. I [R1, R2 = halo, CN, alkyl, etc.; R3 = alkyl, alkenyl, cycloalkyl, etc.; R6 = H, alkyl, cycloalkyl, etc.; R7 is absent when double bond; or R7 = H, alkyl, cycloalkyl, etc.], pharmaceutical compns. comprising at least one compound I and optionally one or more addnl. therapeutic agents and methods of treatment using the compds. I both alone and in combination with one or more addnl. therapeutic agents. Over 400 compds. I were prepared E.g., a multi-step synthesis of II, starting from dibromopyridazinone, was given. Representative compds. I showed the CB-1 receptor binding  $K_i$  values in the range of 0.01 nM to 10000 nM.

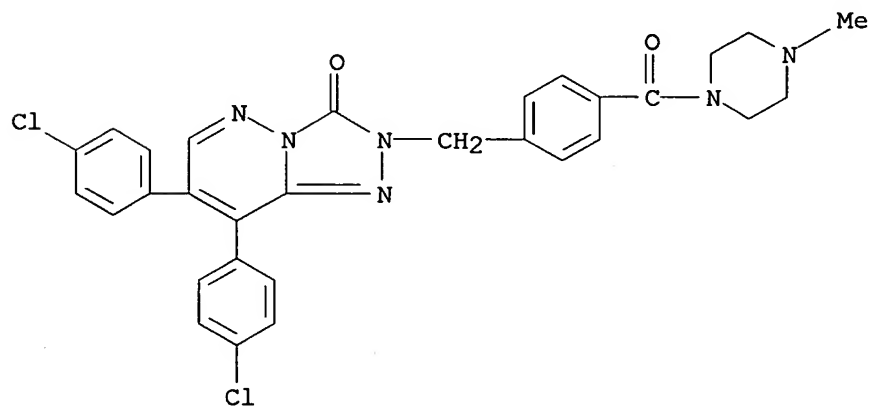
IT **856246-60-1P**

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of azabicyclic heterocycles as cannabinoid receptor modulators)

RN 856246-60-1 CAPLUS

CN Piperazine, 1-[4-[[[7,8-bis(4-chlorophenyl)-3-oxo-1,2,4-triazolo[4,3-b]pyridazin-2(3H)-yl]methyl]benzoyl]-4-methyl- (9CI) (CA INDEX NAME)



10/690,115

16 ANSWER 4 OF 50 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2005:523406 CAPLUS

DOCUMENT NUMBER: 143:59676

TITLE: Preparation of novel hydroxamic acid esters for inhibiting angiogenesis

INVENTOR(S): Fensholdt, Jef; Thorhauge, Jacob; Norreemark, Bjarne

PATENT ASSIGNEE(S): Leo Pharma A/S, Den.

SOURCE: PCT Int. Appl., 351 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

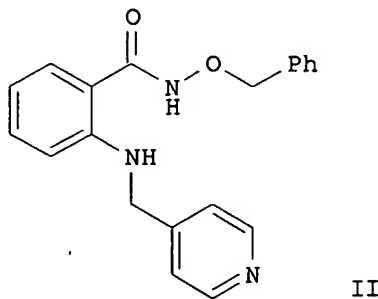
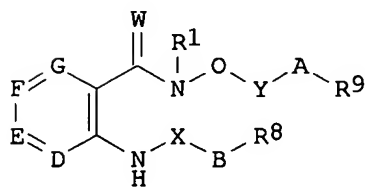
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2005054179	A2	20050616	WO 2004-DK840	20041202
WO 2005054179	A3	20050804		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				

PRIORITY APPLN. INFO.:

US 2003-526262P P 20031203

OTHER SOURCE(S): MARPAT 143:59676

GI



AB The invention relates to compds. I [R1 = H, alkyl, cycloalkyl, etc.; D = N, CR2; E = N, CR3; F = N, CR4; G = N, CR5; R2-R5 = H, halo, OH, etc.; W = O, S, H2, NOR6, NR6; R6 = H, cycloalkyl, aryl, etc.; X, Y = (CH2)n, (CH2)pCH:CH(CH2)q, etc.; n, p, q = 0-6; B = aryl, heteroaryl, cycloalkyl, etc.; R8 = H, halo, OH, etc.; A = alkyl, cycloalkyl, heteroaryl, etc.; R9 = H, oxo, halo, etc.; with provision], for use-alone or in combination with one or more other pharmaceutically active compds.- in therapy, for treating diseases associated with deregulated angiogenesis, such as cancer.

Over 400 compds. I were prepared Thus, reacting 2-[(pyridin-4-ylmethyl)amino]benzoic acid (preparation given) with O-benzylhydroxylamine hydrochloride afforded II which showed -logIC50 of 7.1 in an assay for in vitro KDR inhibition.

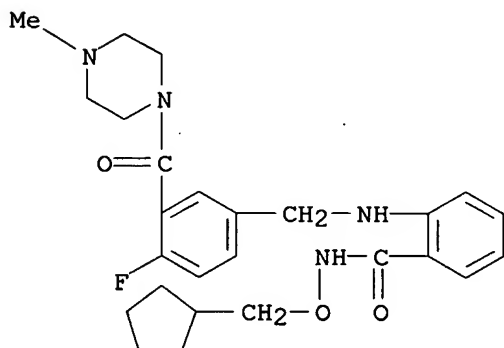
IT **854379-38-7P**

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of novel hydroxamic acid esters for inhibiting angiogenesis)

RN 854379-38-7 CAPLUS

CN Benzamide, N-(cyclopentylmethoxy)-2-[[[4-fluoro-3-[(4-methyl-1-piperazinyl)carbonyl]phenyl]methyl]amino]- (9CI) (CA INDEX NAME)



10/690,115

ANSWER 5 OF 50 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2005:424962 CAPLUS

DOCUMENT NUMBER: 144:331574

TITLE: Synthesis of solanesylamines-nitrogen mustard

AUTHOR(S): Bu, Zhan-wei; Liu, Da-xin; Liu, Yang; Zhao, Jin; Wang, Chao-jie

CORPORATE SOURCE: College of Chemistry and Chemical Engineering, Henan University, Kaifeng, Henan, 475001, Peop. Rep. China

SOURCE: Huaxue Yanjiu (2005), 16(1), 19-22

CODEN: HUYAF4; ISSN: 1008-1011

PUBLISHER: Huaxue Yanjiu Bianjibu

DOCUMENT TYPE: Journal

LANGUAGE: Chinese

AB Two new nitrogen mustard compds. using solanesylamines as the targeted carriers were first designed and synthesized. Title compds. were synthesized from N,N-di(chloroethyl)amine hydrochloride salt and phthalic anhydride to obtain 2-[[bis(2-chloroethyl)amino]carbonyl]benzoic acid, then reacted with solanesylamine or solanesylpiperazine in the presence of dicyclohexylcarbodiimide to give the two target compds. The structures of target compds. were confirmed by IR, <sup>1</sup>H NMR, MS and elemental anal.

IT 880159-22-8P

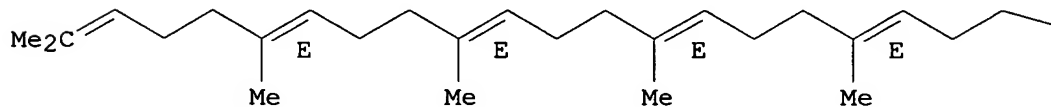
RL: SPN (Synthetic preparation); PREP (Preparation)  
(synthesis of solanesylamines-nitrogen mustard)

RN 880159-22-8 CAPLUS

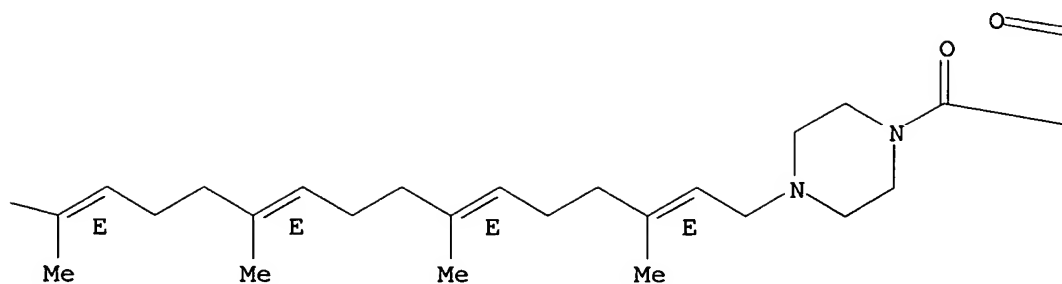
CN Benzamide, N,N-bis(2-chloroethyl)-2-[4-[(2E,6E,10E,14E,18E,22E,26E,30E)-3,7,11,15,19,23,27,31,35-nonamethyl-2,6,10,14,18,22,26,30,34-hexatriacontanonaenyl]-1-piperazinyl]carbonyl]- (9CI) (CA INDEX NAME)

Double bond geometry as shown.

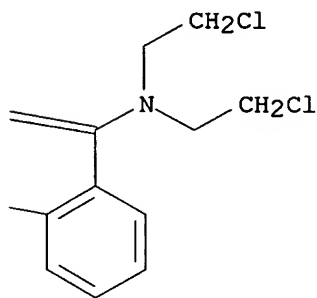
PAGE 1-A



PAGE 1-B



PAGE 1-C



ANSWER 6 OF 50 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2005:347016 CAPLUS

DOCUMENT NUMBER: 142:411252

TITLE: Preparation of azabicyclooctane derivatives as CXCR3 antagonists

INVENTOR(S): Habashita, Hiromu; Suzuki, Ryo; Shibayama, Shiro; Tanihiro, Tatsuya; Kaneko, Yousuke; Egashira, Hiromu; Nishiyama, Eiji; Yamatsuta, Katsura; Fujita, Setsuko

PATENT ASSIGNEE(S): Ono Pharmaceutical Co., Ltd., Japan

SOURCE: PCT Int. Appl., 171 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

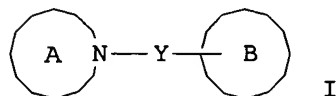
LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2005035534	A1	20050421	WO 2004-JP14864	20041007
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				

PRIORITY APPLN. INFO.: JP 2003-349033 A 20031008  
JP 2004-266040 A 20040913

OTHER SOURCE(S): MARPAT 142:411252  
GI

AB Title compds. I [ring A = (un)substituted heterobicyclic, heterotricyclic; ring B = (un)substituted cycle; Y = bond, spacer] were prepared. For example, 1,3,3-trimethyl-6-(2-naphthoyl)-6-azabicyclo[3.2.1]octane (II) was prepared from 1,3,3-trimethyl-6-azabicyclo[3.2.1]octane. In 11 $\beta$ -HSD1 inhibition assays, the IC<sub>50</sub> value of compound II was 29 nM. Compds. I are claimed useful for the treatment of inflammation, allergy, etc. Formulations are given.

IT 850366-66-4P 850366-99-3P 850367-31-6P

850367-65-6P 850368-44-4P 850368-47-7P

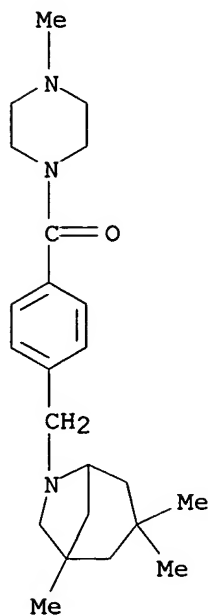
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of azabicyclooctane derivs. as CXCR3 antagonists for treatment of treatment of inflammation, allergy, etc.)

RN 850366-66-4 CAPLUS

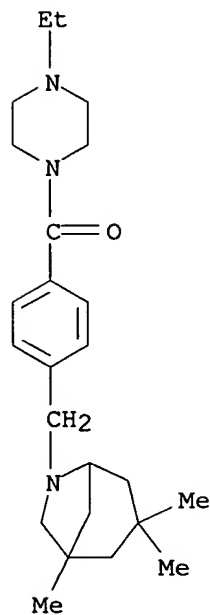
10/690,115

CN Piperazine, 1-methyl-4-[4-[(1,3,3-trimethyl-6-azabicyclo[3.2.1]oct-6-yl)methyl]benzoyl]- (9CI) (CA INDEX NAME)



RN 850366-99-3 CAPLUS

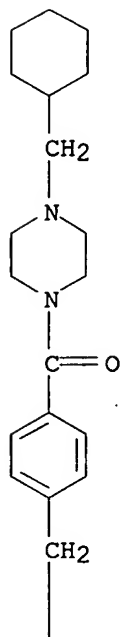
CN Piperazine, 1-ethyl-4-[4-[(1,3,3-trimethyl-6-azabicyclo[3.2.1]oct-6-yl)methyl]benzoyl]- (9CI) (CA INDEX NAME)



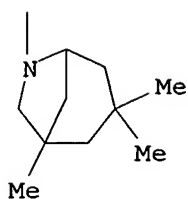
RN 850367-31-6 CAPLUS

CN Piperazine, 1-(cyclohexylmethyl)-4-[4-[(1,3,3-trimethyl-6-azabicyclo[3.2.1]oct-6-yl)methyl]benzoyl]- (9CI) (CA INDEX NAME)

PAGE 1-A



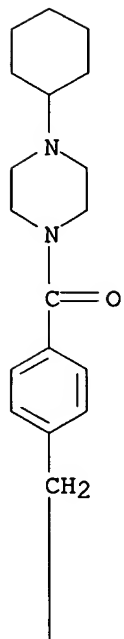
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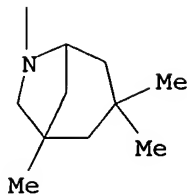
RN 850367-65-6 CAPLUS  
 CN Piperazine, 1-cyclohexyl-4-[4-[(1,3,3-trimethyl-6-azabicyclo[3.2.1]oct-6-yl)methyl]benzoyl]- (9CI) (CA INDEX NAME)



PAGE 1-A



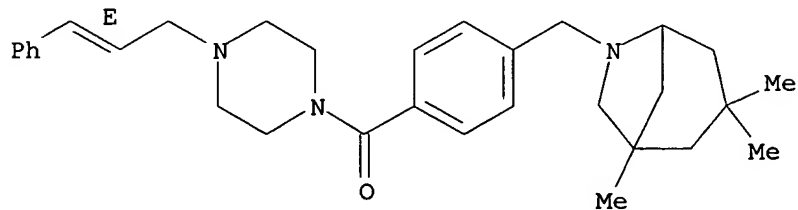
PAGE 2-A



RN 850368-44-4 CAPLUS

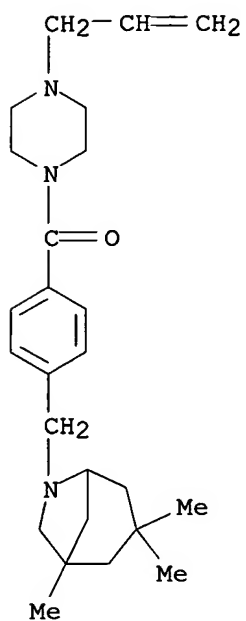
CN Piperazine, 1-[(2E)-3-phenyl-2-propenyl]-4-[4-[(1,3,3-trimethyl-6-azabicyclo[3.2.1]oct-6-yl)methyl]benzoyl]- (9CI) (CA INDEX NAME)

Double bond geometry as shown.



RN 850368-47-7 CAPLUS

CN Piperazine, 1-(2-propenyl)-4-[4-[(1,3,3-trimethyl-6-azabicyclo[3.2.1]oct-6-yl)methyl]benzoyl]- (9CI) (CA INDEX NAME)



REFERENCE COUNT:

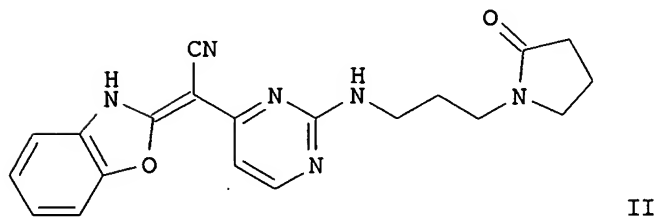
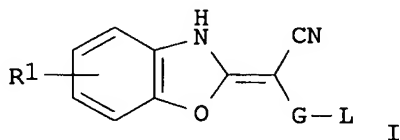
17

THERE ARE 17 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

10/690,115

16 ANSWER 7 OF 50 CAPLUS COPYRIGHT 2006 ACS on STN  
ACCESSION NUMBER: 2005:260062 CAPLUS  
DOCUMENT NUMBER: 142:336386  
TITLE: Preparation of benzoxazolylideneacetonitriles for  
treating metabolic disorders mediated by insulin  
resistance or hyperglycemia  
INVENTOR(S): Schwarz, Matthias; Gaillard, Pascale; Page, Patrick;  
Gotteland, Jean-Pierre; Thomas, Russell J.  
PATENT ASSIGNEE(S): Applied Research Systems ARS Holding N.V., Neth.  
Antilles  
SOURCE: PCT Int. Appl., 114 pp.  
CODEN: PIXXD2  
DOCUMENT TYPE: Patent  
LANGUAGE: English  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2005026159	A1	20050324	WO 2004-EP52141	20040910
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
AU 2004272307	A1	20050324	AU 2004-272307	20040910
CA 2534319	AA	20050324	CA 2004-2534319	20040910
PRIORITY APPLN. INFO.:			EP 2003-102739	A 20030912
			WO 2004-EP52141	W 20040910
OTHER SOURCE(S):		MARPAT 142:336386		
GI				



AB The title compds. I [G = pyrimidinyl; L = amino, 3-8 membered

heterocycloalkyl, containing at least one heteroatom selected from N, O, S, or L = acylamino; R1 = H, sulfonyl, amino, carboxy, aminocarbonyl, alkyl, alkenyl, alkynyl, alkoxy, aryl, halo, cyano or hydroxyl, useful in the treatment of metabolic disorders mediated by insulin resistance or hyperglycemia, comprising diabetes type II, inadequate glucose tolerance, insulin resistance, obesity, polycystic ovary syndrome (PCOS), were prepared and formulated. E.g., a multi-step synthesis of II, was given. The compds. I were tested in GSK3 $\beta$ (h) in vitro assay (data given for representative compds. I).

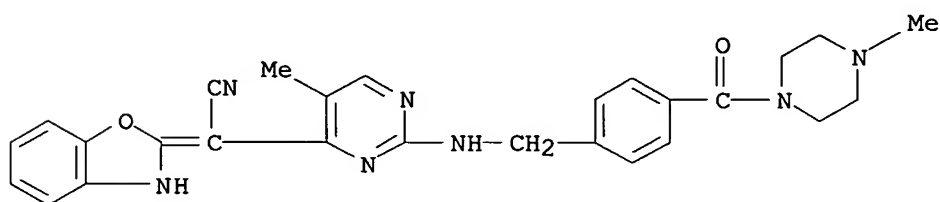
IT 848655-39-0P 848655-40-3P 848655-42-5P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of benzoxazolyldienecetonitriles for treating metabolic disorders mediated by insulin resistance or hyperglycemia)

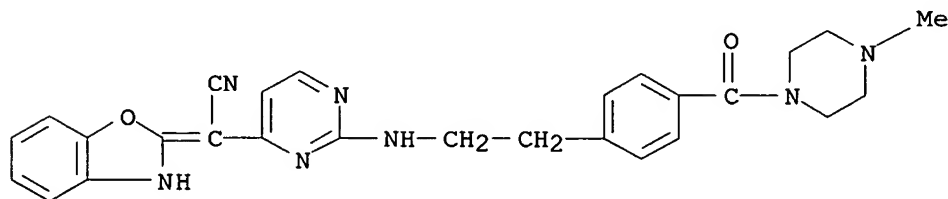
RN 848655-39-0 CAPLUS

CN Piperazine, 1-[4-[[[4-(2(3H)-benzoxazolyldienecyanomethyl)-5-methyl-2-pyrimidinyl]amino]methyl]benzoyl]-4-methyl- (9CI) (CA INDEX NAME)



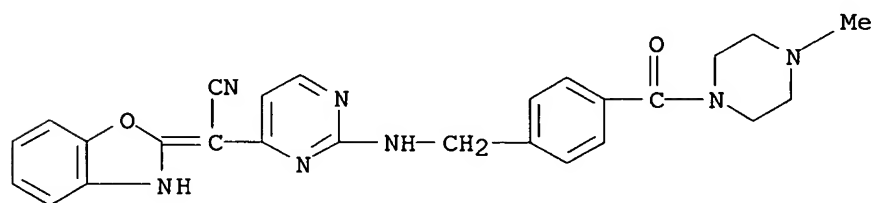
RN 848655-40-3 CAPLUS

CN Piperazine, 1-[4-[2-[[4-(2(3H)-benzoxazolyldienecyanomethyl)-2-pyrimidinyl]amino]ethyl]benzoyl]-4-methyl- (9CI) (CA INDEX NAME)



RN 848655-42-5 CAPLUS

CN Piperazine, 1-[4-[[[4-(2(3H)-benzoxazolyldienecyanomethyl)-2-pyrimidinyl]amino]methyl]benzoyl]-4-methyl- (9CI) (CA INDEX NAME)



REFERENCE COUNT:

2

THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS

10/690,115

RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

16 ANSWER 8 OF 50 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2005:249011 CAPLUS

DOCUMENT NUMBER: 142:481992

TITLE: Trimethylsilyl-directed 1,3-dipolar cycloaddition reactions in the solid-phase synthesis of 1,2,3-triazoles

AUTHOR(S): Coats, Steven J.; Link, Jeffrey S.; Gauthier, Diane; Hlasta, Dennis J.

CORPORATE SOURCE: Johnson Johnson Pharmaceutical Research Development, L.L.C., Spring House, PA, 19477-0776, USA

SOURCE: Organic Letters (2005), 7(8), 1469-1472

CODEN: ORLEF7; ISSN: 1523-7060

PUBLISHER: American Chemical Society

DOCUMENT TYPE: Journal

LANGUAGE: English

OTHER SOURCE(S): CASREACT 142:481992

AB A regioselective method for the preparation of 1,5-trisubstituted 1H-1,2,3-triazole derivs. via a 1,3-dipolar cycloaddn. of 1-[tri(methyl)silyl]acetylene derivs. with azides is described. Immobilization of the azide on REM resin and subsequent cycloaddn. afforded a 2 + 2 + 4 + 3 membered 1,5-disubstituted 1H-1,2,3-triazole library with an average purified yield of 68%.

IT 851883-72-2P 851883-74-4P 851883-78-8P

851883-80-2P 851883-85-7P 851883-89-1P

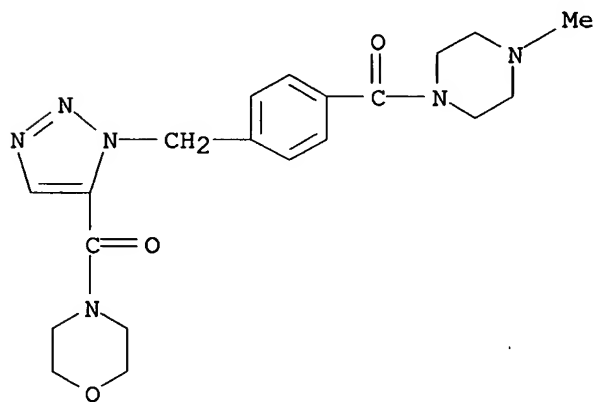
851883-91-5P

RL: SPN (Synthetic preparation); PREP (Preparation)

(preparation of 1H-1,2,3-triazole-5-carboxamide derivative by solid-phase synthesis using REM resin as synthetic platform)

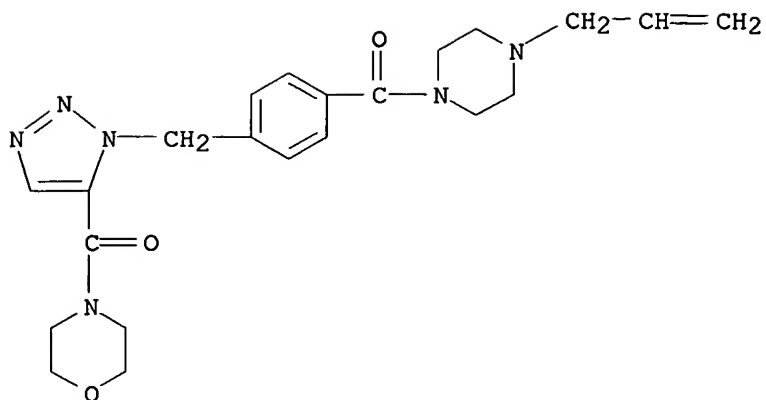
RN 851883-72-2 CAPLUS

CN Morpholine, 4-[[1-[[4-[(4-methyl-1-piperazinyl)carbonyl]phenyl]methyl]-1H-1,2,3-triazol-5-yl]carbonyl]- (9CI) (CA INDEX NAME)



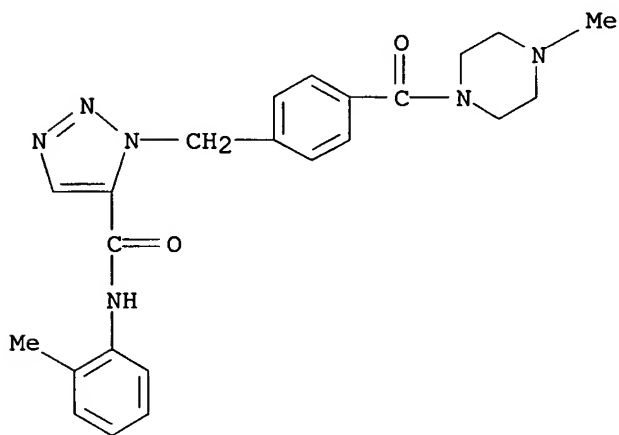
RN 851883-74-4 CAPLUS

CN Morpholine, 4-[[1-[[4-[[4-(2-propenyl)-1-piperazinyl]carbonyl]phenyl]methyl]-1H-1,2,3-triazol-5-yl]carbonyl]- (9CI) (CA INDEX NAME)



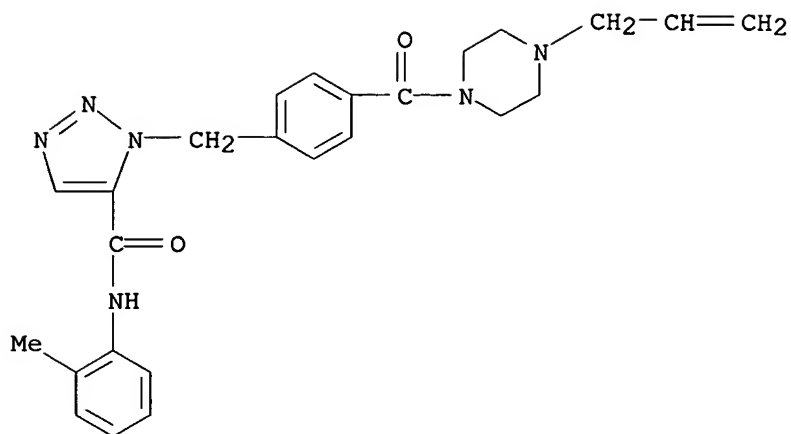
RN 851883-78-8 CAPLUS

CN 1H-1,2,3-Triazole-5-carboxamide, N-(2-methylphenyl)-1-[[4-[(4-methyl-1-piperazinyl)carbonyl]phenyl]methyl]- (9CI) (CA INDEX NAME)



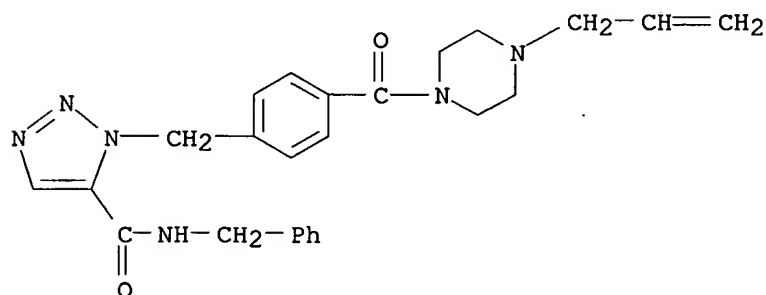
RN 851883-80-2 CAPLUS

CN 1H-1,2,3-Triazole-5-carboxamide, N-(2-methylphenyl)-1-[[4-[(4-(2-propenyl)-1-piperazinyl)carbonyl]phenyl]methyl]- (9CI) (CA INDEX NAME)



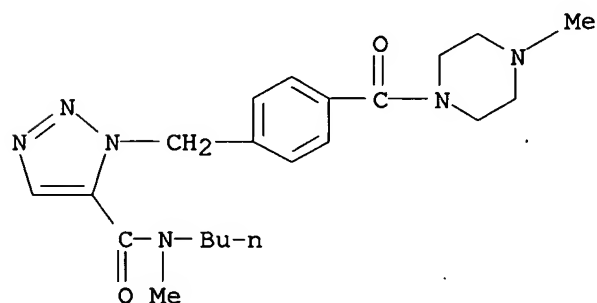
RN 851883-85-7 CAPLUS

CN 1H-1,2,3-Triazole-5-carboxamide, N-(phenylmethyl)-1-[[4-[[4-(2-propenyl)-1-piperazinyl]carbonyl]phenyl]methyl]- (9CI) (CA INDEX NAME)



RN 851883-89-1 CAPLUS

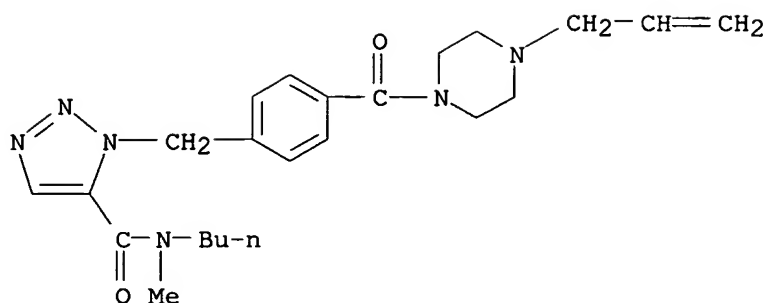
CN 1H-1,2,3-Triazole-5-carboxamide, N-butyl-N-methyl-1-[[4-[[4-methyl-1-piperazinyl]carbonyl]phenyl]methyl]- (9CI) (CA INDEX NAME)



RN 851883-91-5 CAPLUS

CN 1H-1,2,3-Triazole-5-carboxamide, N-butyl-N-methyl-1-[[4-[[4-(2-propenyl)-1-piperazinyl]carbonyl]phenyl]methyl]- (9CI) (CA INDEX NAME)



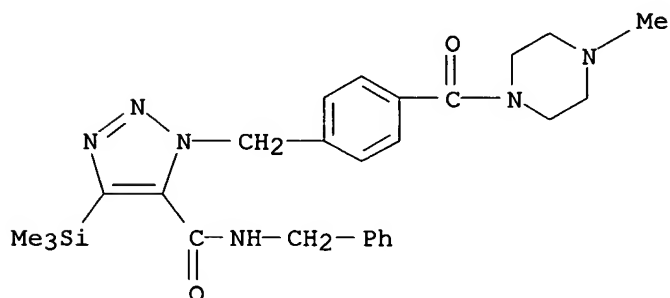
IT **851883-70-0P**

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation of 1H-1,2,3-triazole-5-carboxamide derivative using REM resin-supported [[[piperazinyl]carbonyl]phenyl]methyl]-1,2,3-triazolecarboxylic acid derivative as synthetic intermediate)

RN 851883-70-0 CAPLUS

CN 1H-1,2,3-Triazole-5-carboxamide, 1-[[4-[(4-methyl-1-piperazinyl)carbonyl]phenyl]methyl]-N-(phenylmethyl)-4-(trimethylsilyl)-(9CI) (CA INDEX NAME)

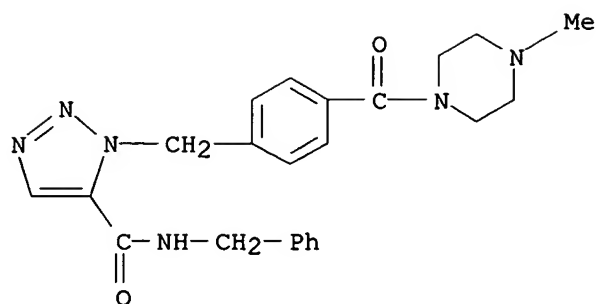
IT **851883-71-1P**

RL: SPN (Synthetic preparation); PREP (Preparation)

(preparation of 1H-1,2,3-triazole-5-carboxamide derivative using REM resin-supported [[[piperazinyl]carbonyl]phenyl]methyl]-1,2,3-triazolecarboxylic acid derivative as synthetic intermediate)

RN 851883-71-1 CAPLUS

CN 1H-1,2,3-Triazole-5-carboxamide, 1-[[4-[(4-methyl-1-piperazinyl)carbonyl]phenyl]methyl]-N-(phenylmethyl)- (9CI) (CA INDEX NAME)



REFERENCE COUNT:

15

THERE ARE 15 CITED REFERENCES AVAILABLE FOR THIS  
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

~~16~~ ANSWER 9 OF 50 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2005:219775 CAPLUS

DOCUMENT NUMBER: 142:280425

TITLE: Preparation of amino acid derivatives as cathepsin inhibitors

INVENTOR(S): Bayly, Christopher; Black, Cameron; McKay, Daniel J.

PATENT ASSIGNEE(S): Merck Frosst Canada & Co., Can.

SOURCE: PCT Int. Appl., 106 pp.

CODEN: PIXXD2

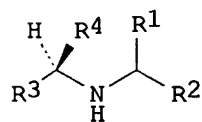
DOCUMENT TYPE: Patent

LANGUAGE: English

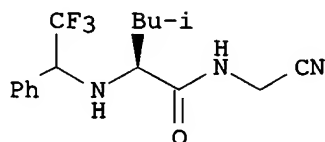
FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2005021487	A1	20050310	WO 2004-CA1577	20040823
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
AU 2004268707	A1	20050310	AU 2004-268707	20040823
CA 2535366	AA	20050310	CA 2004-2535366	20040823
PRIORITY APPLN. INFO.:			US 2003-498017P	P 20030827
			WO 2004-CA1577	W 20040823
OTHER SOURCE(S):		MARPAT 142:280425		
GI				



I



II

AB The invention relates to compds. I which are cysteine protease inhibitors, including but not limited to inhibitors of cathepsins K, L, S and B, and are useful for treating diseases in which inhibition of bone resorption is indicated, e.g., osteoporosis, osteoarthritis and rheumatoid arthritis. Thus, a mixture of L-leucine Me ester hydrochloride, 2,2,2-trifluoroacetophenone, diisopropylethylamine and  $\text{TiCl}_4$  in  $\text{CH}_2\text{Cl}_2$  was stirred overnight, addnl.  $\text{TiCl}_4$  added, and the mixture stirred an addnl. 3 h. A solution of  $\text{NaCNBH}_3$  in MeOH was added and the mixture stirred 2 h to afford Me N-(2,2,2-trifluoro-1-phenylethyl)-L-leucinate. Saponification of the ester and reaction with aminoacetonitrile hydrochloride in DMF in the presence of PyBOP and Et<sub>3</sub>N yielded L-leucinamide derivative II.

IT 603140-22-3P

10/690,115

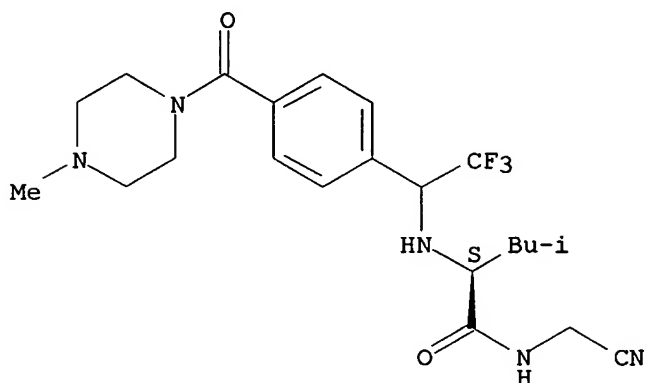
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU  
(Therapeutic use); BIOL (Biological study); PREP (Preparation); USES  
(Uses)

(preparation of amino acid derivs. as cathepsin inhibitors)

RN 603140-22-3 CAPLUS

CN Pentanamide, N-(cyanomethyl)-4-methyl-2-[[2,2,2-trifluoro-1-[4-[(4-methyl-1-piperazinyl)carbonyl]phenyl]ethyl]amino]-, (2S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



REFERENCE COUNT:

5

THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS  
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

10/690,115

ANSWER 10 OF 50 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2005:177838 CAPLUS

DOCUMENT NUMBER: 142:280057

TITLE: Preparation of substituted pyridinones as modulators of p38 MAP kinase

INVENTOR(S): Devadas, Balekudru; Walker, John; Selness, Shaun R.; Boehm, Terri L.; Durley, Richard C.; Devraj, Rajesh; Hickory, Brian S.; Rucker, Paul V.; Jerome, Kevin D.; Madsen, Heather M.; Alvira, Edgardo; Promo, Michele A.; Bleviss-Bal, Radhika M.; Marrufo, Laura D.; Hitchcock, Jeff; Owen, Thomas; Naing, Win; Xing, Li; Shieh, Huey S.; Sambandam, Aruna; Liu, Shuang; Scott, Ian L.; Mcgee, Kevin F.

PATENT ASSIGNEE(S): Pharmacia Corporation, USA

SOURCE: PCT Int. Appl., 968 pp.

CODEN: PIXXD2

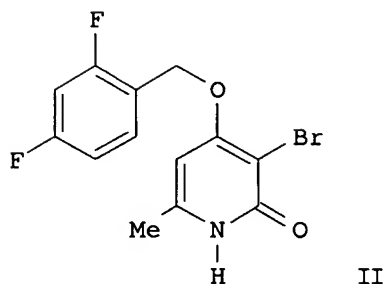
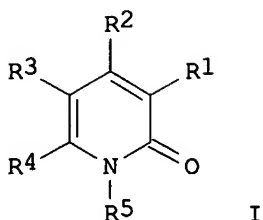
DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2005018557	A2	20050303	WO 2004-US26193	20040813
WO 2005018557	A3	20050804		
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW			
RW:	BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG			
NL 1026826	A1	20050216	NL 2004-1026826	20040812
US 2005176775	A1	20050811	US 2004-918826	20040813
PRIORITY APPLN. INFO.:			US 2003-494959P	P 20030813
OTHER SOURCE(S):	MARPAT 142:280057			
GI				



AB Disclosed are title compds. I and their pharmaceutically acceptable salts [R1 H, halo, NO2, CHO, CN, (un)substituted hydroxy/dihydroxy/aryl/alkyl, etc.; R2 = H, OH, halo, (un)substituted alkyl, alkoxy, etc.; R3 = H, halo, (un)substituted aryl/alkoxycarbonyl, arylalkyl, arylthio, etc.; R4 = H, (un)substituted alkyl; R5 = H, aryl, arylalkyl, etc.]. These compds. are useful for treating diseases and conditions caused or exacerbated by unregulated p38 MAP Kinase and/or TNF activity. Pharmaceutical compns. containing the compds., methods of preparing the compds. and methods of treatment

using the compds. are also disclosed. For example, II was prepared, in 3 steps, reacting 4-hydroxy-6-methylpyrone with NH4OH, followed by O-alkylation with 2,4-difluorobenzyl chloride, and bromination with Br2 in AcOH/H2O. Selected I inhibited MKK6-activated human p38 $\alpha$  kinase phosphorylation of a biotinylated substrate or human p38 $\alpha$ -induced phosphorylation of EGFRP (epidermal growth factor receptor peptide) with an IC50 in the range of 1  $\mu$ M to 25  $\mu$ M.

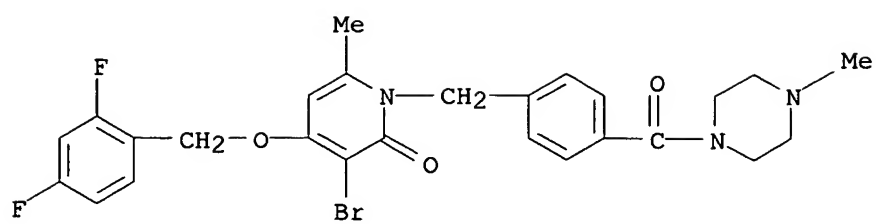
IT **586375-50-0P**, 3-Bromo-4-[(2,4-difluorobenzyl)oxy]-6-methyl-1-[4-[(4-methylpiperazinyl)carbonyl]benzyl]pyridin-2(1H)-one

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(p38 kinase inhibitor; preparation of pyridinones as modulators of p38 MAP kinase and TNF activity)

RN 586375-50-0 CAPLUS

CN Piperazine, 1-[4-[[3-bromo-4-[(2,4-difluorophenyl)methoxy]-6-methyl-2-oxo-1(2H)-pyridinyl]methyl]benzoyl]-4-methyl- (9CI) (CA INDEX NAME)



10/690,115

~~10~~ ANSWER 11 OF 50 CAPLUS COPYRIGHT 2006 ACS on STN

~~7~~ SESSION NUMBER: 2004:878151 CAPLUS

DOCUMENT NUMBER: 141:366243

TITLE: Preparation of pyrazolopyrimidines as cyclin-dependent kinase inhibitors

INVENTOR(S): Guzi, Timothy J.; Paruch, Kamil; Dwyer, Michael P.; Doll, Ronald J.; Girijavallabhan, Viyyoor M.; Mallams, Alan; Alvarez, Carmen S.; Keertikar, Kartik M.; Rivera, Jocelyn; Chan, Tin-Yau; Madison, Vincent; Fischmann, Thierry O.; Dillard, Lawrence W.; Tran, Vinh D.; He, Zhen Min; James, Ray Anthony; Park, Haengsoon; Paradkar, Vidyadhar M.; Hobbs, Douglas Walsh

PATENT ASSIGNEE(S): Schering Corporation, USA; Pharmacopeia, Inc.

SOURCE: U.S. Pat. Appl. Publ., 1044 pp., Cont.-in-part of US Ser. No. 654,546  
CODEN: USXXCO

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 4

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2004209878	A1	20041021	US 2004-776988	20040211
WO 2005077954	A2	20050825	WO 2005-US3859	20050208
WO 2005077954	A3	20051013		

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW  
RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

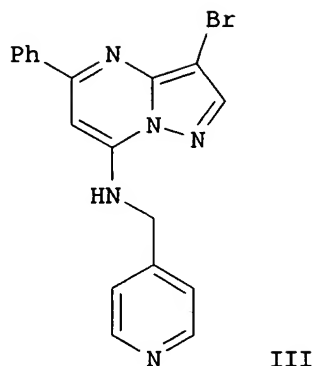
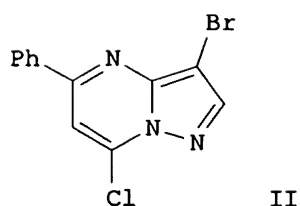
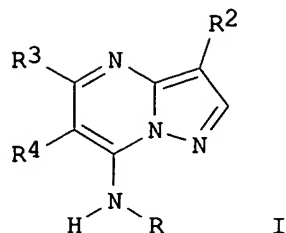
PRIORITY APPLN. INFO.:

US 2002-408027P	P	20020904
US 2002-421959P	P	20021029
US 2003-654546	A2	20030903
US 2004-776988	A	20040211

OTHER SOURCE(S): MARPAT 141:366243

GI





AB The title compds. [I; R = H, alkyl, cycloalkyl, etc.; R2 = alkyl, halo, aryl, etc.; R3 = H, halo, aryl, etc.; R4 = H, halo, alkyl], useful as inhibitors of cyclin dependent kinases for treatment, prevention, inhibition, or amelioration of one or more diseases associated with the CDKs such as cancer, were prepared. Thus, reacting II (preparation given) with 4-aminomethylpyridine afforded 93% III which showed IC50 of 0.020  $\mu$ M and 0.029  $\mu$ M against CDK2 kinase (cyclin A or cyclin E-dependent). The pharmaceutical composition comprising the compound I is claimed. This is a

Part

I of I-III series.

IT **672321-90-3P 672321-92-5P**

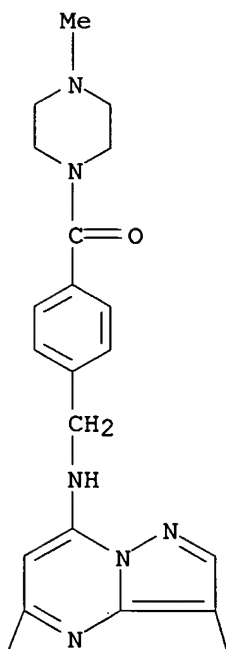
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of pyrazolopyrimidines as cyclin-dependent kinase inhibitors)

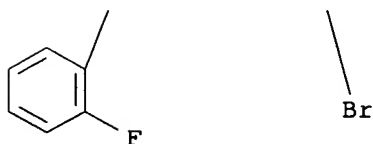
RN 672321-90-3 CAPLUS

CN Piperazine, 1-[4-[[[3-bromo-5-(2-fluorophenyl)pyrazolo[1,5-a]pyrimidin-7-yl]amino]methyl]benzoyl]-4-methyl- (9CI) (CA INDEX NAME)

PAGE 1-A

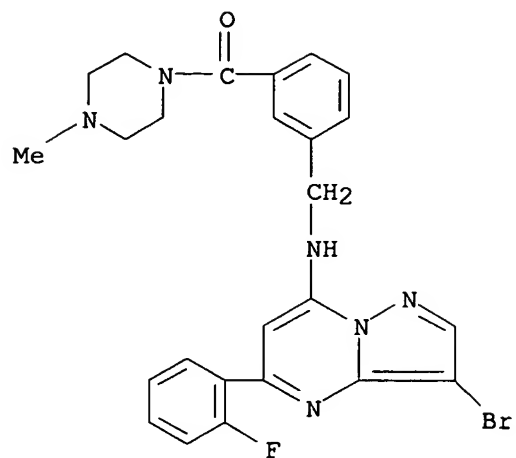


PAGE 2-A



RN 672321-92-5 CAPLUS

CN Piperazine, 1-[3-[[[3-bromo-5-(2-fluorophenyl)pyrazolo[1,5-a]pyrimidin-7-yl]amino]methyl]benzoyl]-4-methyl- (9CI) (CA INDEX NAME)



10/690,115

~~16~~ ANSWER 12 OF 50 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2004:513546 CAPLUS

DOCUMENT NUMBER: 141:71552

TITLE: Preparation of benzoxazin-3-ones and derivatives as inhibitors of PI3K kinase for treating inflammations, cardiovascular diseases and cancers

INVENTOR(S): Barvian, Nicole Chantel; Kolz, Christine Nylund; Para, Kimberly Suzanne; Patt, William Chester; Visnick, Melean

PATENT ASSIGNEE(S): Warner-Lambert Company Llc, USA

SOURCE: PCT Int. Appl., 146 pp.

CODEN: PIXXD2

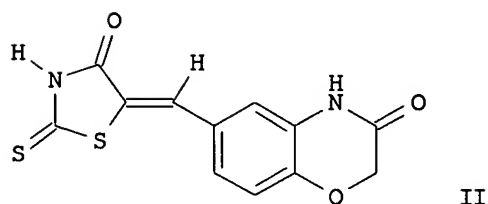
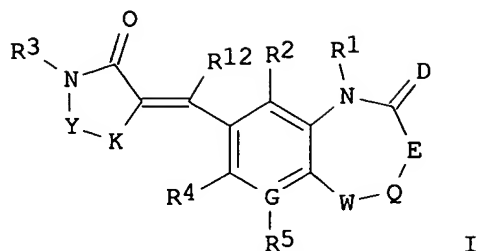
DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004052373	A1	20040624	WO 2003-IB5451	20031125
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
CA 2508601	AA	20040624	CA 2003-2508601	20031125
AU 2003280188	A1	20040630	AU 2003-280188	20031125
EP 1569653	A1	20050907	EP 2003-772558	20031125
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				
BR 2003016386	A	20050927	BR 2003-16386	20031125
JP 2006510661	T2	20060330	JP 2004-558912	20031125
US 2004121996	A1	20040624	US 2003-730680	20031208
PRIORITY APPLN. INFO.:			US 2002-431528P	P 20021206
			WO 2003-IB5451	W 20031125
OTHER SOURCE(S):	MARPAT	141:71552		
GI				



AB Title compds. I [wherein W = O, S, NH and derivs.; Q, E = independently (CH<sub>2</sub>)<sub>n</sub>; n = 0-1; R<sub>1</sub> = H, carbonyl/cyclo/alkylcyclo/alkyl, alkylenealkoxy, alkyleneheteroaryl, etc.; R<sub>2</sub> = H, CF<sub>3</sub>, CH<sub>3</sub>; R<sub>3</sub> = H, CH<sub>2</sub>CO<sub>2</sub>H, Ph, CH<sub>3</sub>, alkyl, alkenyl; Y = C(:O), C(:S); K = NH, O, CH<sub>2</sub>, S; G = N, C; R<sub>4</sub> = H, F, CF<sub>3</sub>, CH<sub>3</sub>; R<sub>5</sub> = H, alkoxy, alkyl, NO<sub>2</sub>, NH<sub>2</sub> and derivs., etc.; and their pharmaceutically acceptable salts] were prepared as inhibitors of phosphatidylinositol-3 (PI3K) kinase for treating inflammations, cardiovascular diseases and cancers. For example, II was prepared from 4-hydroxy-3-nitrobenzaldehyde and Et bromoacetate via condensation of rhodanine with benzo[1,4]oxazine carboxaldehyde. In an in vitro assay, selected II inhibited PI3K with IC<sub>50</sub> values in the range of 0.002 to 0.29 μM. I are useful for treating rheumatoid arthritis, ankylosing spondylitis, osteoarthritis, inflammations, and autoimmune diseases.

IT **711025-28-4P**, (Z)-4-[3-tert-Butyl-5-[(4-methylpiperazin-1-yl)carbonyl]benzyl]-6-[(4-oxo-2-thioxothiazolidin-5-ylidene)methyl]-4H-benzo[1,4]oxazin-3-one **711025-32-0P**, (Z)-4-[4-[(4-Methylpiperazin-1-yl)carbonyl]benzyl]-6-[(4-oxo-2-thioxothiazolidin-5-ylidene)methyl]-4H-benzo[1,4]oxazin-3-one

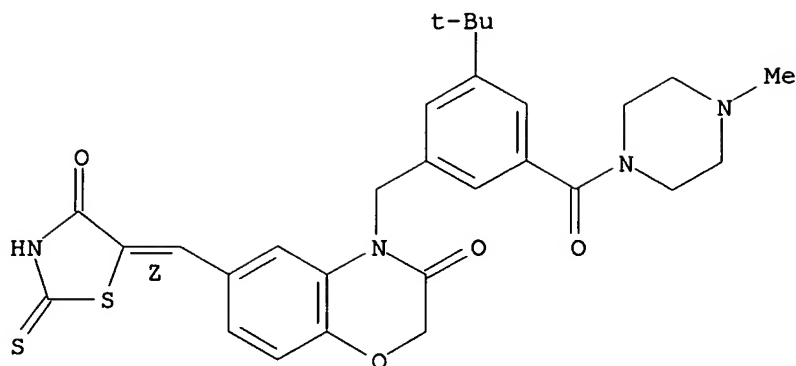
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(PI3K inhibitor; preparation of benzoxazinones as PI3K inhibitors for treating inflammations, cardiovascular diseases and cancers)

RN 711025-28-4 CAPLUS

CN Piperazine, 1-[3-[[2,3-dihydro-3-oxo-6-[(Z)-(4-oxo-2-thioxo-5-thiazolidinylidene)methyl]-4H-1,4-benzoxazin-4-yl]methyl]-5-(1,1-dimethylethyl)benzoyl]-4-methyl- (9CI) (CA INDEX NAME)

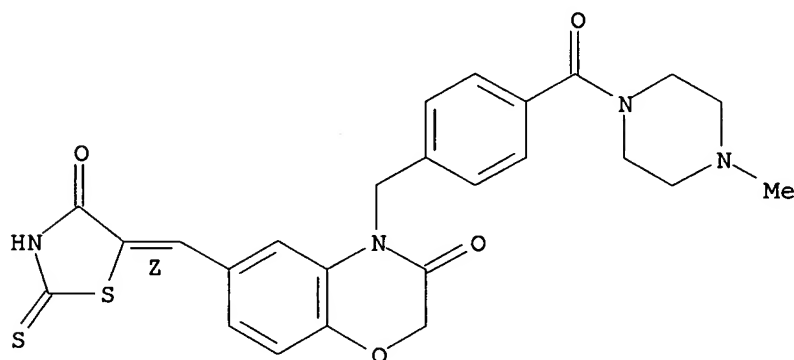
Double bond geometry as shown.



RN 711025-32-0 CAPLUS

CN Piperazine, 1-[4-[[2,3-dihydro-3-oxo-6-[(Z)-(4-oxo-2-thioxo-5-thiazolidinylidene)methyl]-4H-1,4-benzoxazin-4-yl)methyl]benzoyl]-4-methyl- (9CI) (CA INDEX NAME)

Double bond geometry as shown.



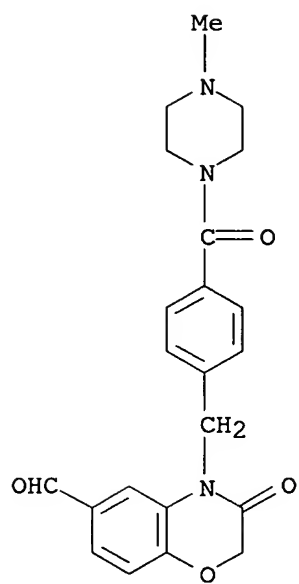
IT **711025-31-9P**, 4-[4-[(4-Methylpiperazin-1-yl)carbonyl]benzyl]-3-oxo-3,4-dihydro-2H-benzo[1,4]oxazine-6-carboxaldehyde

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(intermediate; preparation of benzoxazinones as PI3K inhibitors for treating inflammations, cardiovascular diseases and cancers)

RN 711025-31-9 CAPLUS

CN Piperazine, 1-[4-[(6-formyl-2,3-dihydro-3-oxo-4H-1,4-benzoxazin-4-yl)methyl]benzoyl]-4-methyl- (9CI) (CA INDEX NAME)



16 ANSWER 13 OF 50 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2004:412923 CAPLUS

DOCUMENT NUMBER: 140:423689

TITLE: Preparation of novel pyrimidine-4,6-dicarboxamides for the selective inhibition of collagenases

INVENTOR(S): Klingler, Otmar; Kirsch, Reinhard; Habermann, Joerg; Weithmann, Klaus-Ulrich; Engel, Christian; Pirard, Bernard

PATENT ASSIGNEE(S): Aventis Pharma Deutschland G.m.b.H., Germany

SOURCE: PCT Int. Appl., 122 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: German

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004041788	A1	20040521	WO 2003-EP11515	20031018
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
DE 10251019	A1	20040519	DE 2002-10251019	20021102
DE 10254092	A1	20040603	DE 2002-10254092	20021120
CA 2504153	AA	20040521	CA 2003-2504153	20031018
AU 2003301847	A1	20040607	AU 2003-301847	20031018
EP 1560815	A1	20050810	EP 2003-810401	20031018
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				
BR 2003015055	A	20050816	BR 2003-15055	20031018
JP 2006513158	T2	20060420	JP 2004-548752	20031018
NO 2005002628	A	20050708	NO 2005-2628	20050531
PRIORITY APPLN. INFO.:			DE 2002-10251019	A 20021102
			DE 2002-10254092	A 20021120
			WO 2003-EP11515	W 20031018
OTHER SOURCE(S):	MARPAT	140:423689		
GI				

\* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT \*

AB Pyrimidine-4,6-dicarboxamides I [R1 = H, C1-6-alkyl; R2 = (un)substituted C1-6-alkyl; R3, R4, R5, R6, R7 = H, halogen, (un)substituted C1-6-alkyl; C1-6-haloalkyl, O-(C1-6-alkyl), S-(C1-6-alkyl); R4R5, R5R6 (together to with the carbons to which they are attached) = 5- or 6-membered carbocyclic, aromatic, heterocyclic or heteroaryl ring (hetero compound containing one or more O, S or N)] are suitable for the selective inhibition of collagenase (MMP 13). Pyrimidine-4,6-dicarboxamides I can be prepared from



pyrimidine-4,6-dicarboxylic acid derivs. II (Y = halogen, OH, Cl-6-alkoxy; or anhydride) via reaction with R1R2NH or benzylamine III to give the monoamides IV or V, which in turn undergo reaction with benzylamine III or R1R2NH, resp. Thus, VI was prepared from di-Me pyrimidine-4,6-dicarboxylate via partial amidation with 3-MeOC6H4CH2NH2 in THF, saponification with LiOH in THF, amidation with 4-(NH2CH2)C6H4CO2Me·HCl in DMF containing TOTU and NEt3, saponification with LiOH in THF and amidation with Et2NH in DMF containing TOTU

and NEt3. The pyrimidine-4,6-dicarboxamides can thus be used for the treatment of degenerative joint diseases. The bioactivity of VI was determined [IC50 = 4 nM vs. MMP 13].

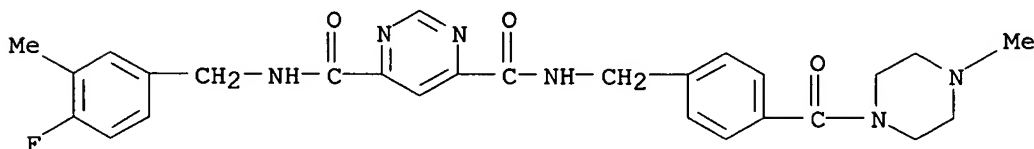
IT 691002-32-1P 691002-65-0P 691002-70-7P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of novel pyrimidine-4,6-dicarboxamides for the selective inhibition of collagenases)

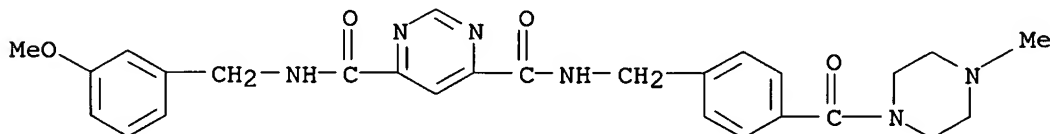
RN 691002-32-1 CAPLUS

CN 4,6-Pyrimidinedicarboxamide, N-[(4-fluoro-3-methylphenyl)methyl]-N'-[[4-[(4-methyl-1-piperazinyl)carbonyl]phenyl]methyl]- (9CI) (CA INDEX NAME)



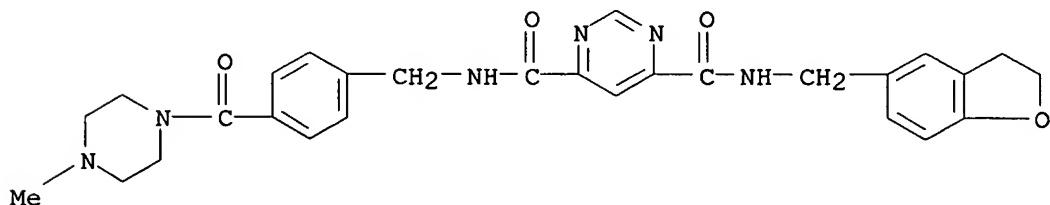
RN 691002-65-0 CAPLUS

CN 4,6-Pyrimidinedicarboxamide, N-[(3-methoxyphenyl)methyl]-N'-[[4-[(4-methyl-1-piperazinyl)carbonyl]phenyl]methyl]- (9CI) (CA INDEX NAME)



RN 691002-70-7 CAPLUS

CN 4,6-Pyrimidinedicarboxamide, N-[(2,3-dihydro-5-benzofuranyl)methyl]-N'-[[4-[(4-methyl-1-piperazinyl)carbonyl]phenyl]methyl]- (9CI) (CA INDEX NAME)



REFERENCE COUNT:

4

THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

10/690,115

L6 ANSWER 14 OF 50 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2004:370916 CAPLUS

DOCUMENT NUMBER: 140:391298

TITLE: Preparation of piperaziny and diazepanyl benzamides and benzothioamides as inhibitors of histamine H3 receptor

INVENTOR(S): Apodaca, Richard L.; Jablonowski, Jill A.; Ly, Kiev S.; Shah, Chandravan R.; Swanson, Devin M.; Xiao, Wei

PATENT ASSIGNEE(S): Janssen Pharmaceutica, N.V., Belg.

SOURCE: PCT Int. Appl., 100 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

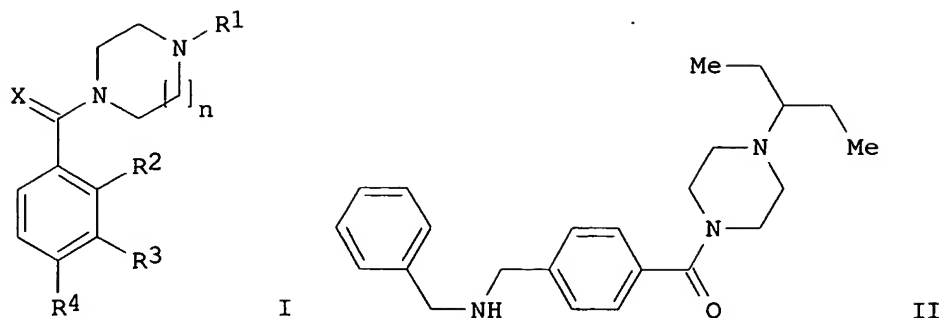
FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004037801	A1	20040506	WO 2003-US33343	20031021
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
CA 2504269	AA	20040506	CA 2003-2504269	20031021
AU 2003301552	A1	20040513	AU 2003-301552	20031021
US 2004110746	A1	20040610	US 2003-690115	20031021
EP 1558595	A1	20050803	EP 2003-809596	20031021
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				
BR 2003015644	A	20050830	BR 2003-15644	20031021
CN 1729180	A	20060201	CN 2003-80107052	20031021
JP 2006510609	T2	20060330	JP 2004-546967	20031021
NO 2005002278	A	20050606	NO 2005-2278	20050510
PRIORITY APPLN. INFO.:			US 2002-420495P	P 20021023
			WO 2003-US33343	W 20031021

OTHER SOURCE(S): MARPAT 140:391298

GI



AB The title compds. [I; R1 = alkyl, alkenyl, cycloalkyl, etc.; n = 1-2; X = O, S; one of R2-R4 = G and the other two are H, F, Cl, Br, CF3, Me, NO2, alkoxy; G = LQ; L = (CH2)m; m = 1-7; Q = NR8R9 (R8, R9 = H, alkyl, Ph, etc.), (un)substituted saturated 3-12 membered N-linked heterocyclyl], useful for treating histamine-mediated conditions, were prepared. Thus, reacting 4-[4-(1-ethylpropyl)piperazine-1-carbonyl]benzaldehyde with PhCH2NH2 in the presence of NaBH(OAc)3 and AcOH afforded II which showed Ki of 2.0 nM against histamine H3 receptor binding. The pharmaceutical compns. comprising the title compds. I are claimed.

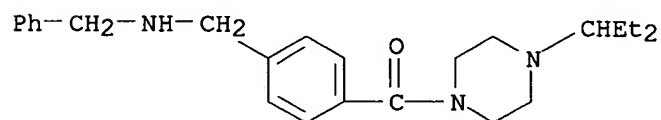
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 686721-26-6P 686721-27-7P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of piperazinyl and diazepanyl benzamides and benzothioamides as inhibitors of histamine H3 receptor)

RN 686720-78-5 CAPLUS

CN Piperazine, 1-(1-ethylpropyl)-4-[4-[(phenylmethyl)amino]methyl]benzoyl)-(9CI) (CA INDEX NAME)

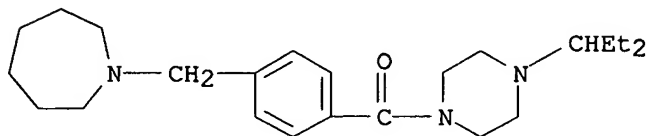


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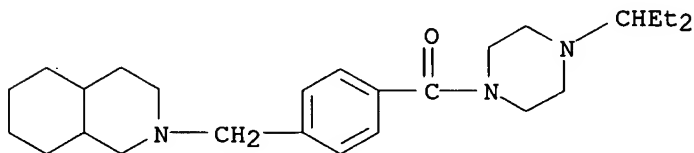
CN Piperazine, 1-(1-ethylpropyl)-4-[4-[(hexahydro-1H-azepin-1-yl)methyl]benzoyl]- (9CI) (CA INDEX NAME)

37-d



RN 686720-80-9 CAPLUS

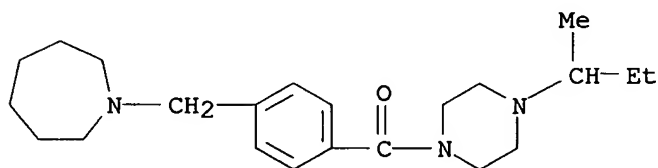
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ar

RN 686720-81-0 CAPLUS

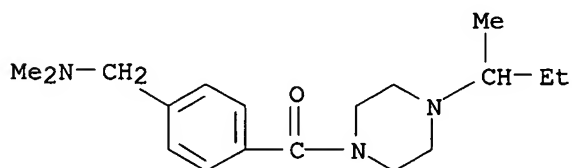
CN Piperazine, 1-[4-[(hexahydro-1H-azepin-1-yl)methyl]benzoyl]-4-(1-methylpropyl)- (9CI) (CA INDEX NAME)



c

RN 686720-82-1 CAPLUS

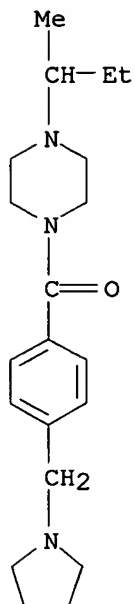
CN Piperazine, 1-[4-[(dimethylamino)methyl]benzoyl]-4-(1-methylpropyl)- (9CI) (CA INDEX NAME)



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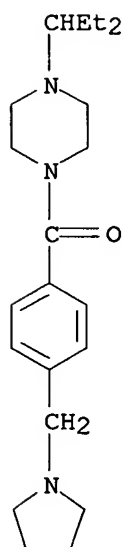
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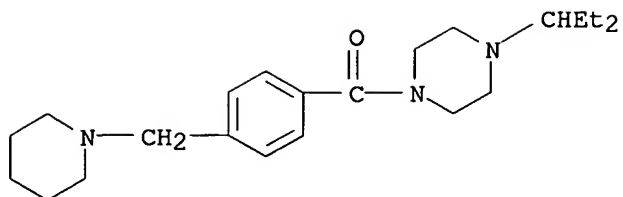
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RN 686720-84-3 CAPLUS  
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(CA INDEX NAME)



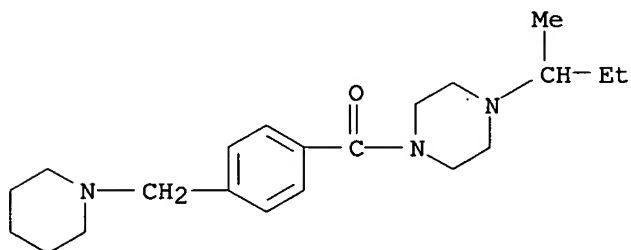
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CN Piperazine, 1-(1-diethylpropyl)-4-[4-(1-piperidinylmethyl)benzoyl]- (9CI)  
(CA INDEX NAME)



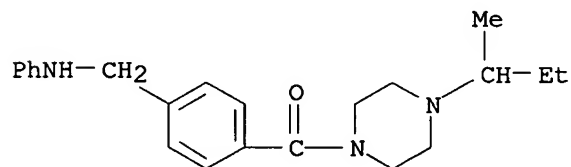
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RN 686720-86-5 CAPLUS

CN Piperazine, 1-(1-methylpropyl)-4-[4-(1-piperidinylmethyl)benzoyl]- (9CI)  
(CA INDEX NAME)

ai

RN 686720-87-6 CAPLUS

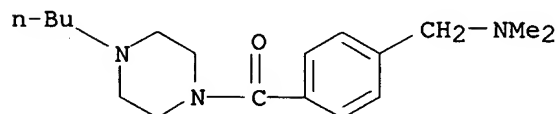
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(CA INDEX NAME)

ah

RN 686720-88-7 CAPLUS

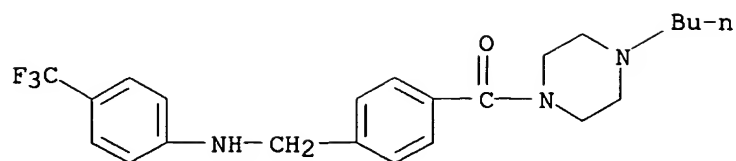
CN Piperazine, 1-butyl-4-[4-[(dimethylamino)methyl]benzoyl]- (9CI) (CA INDEX  
NAME)

ae



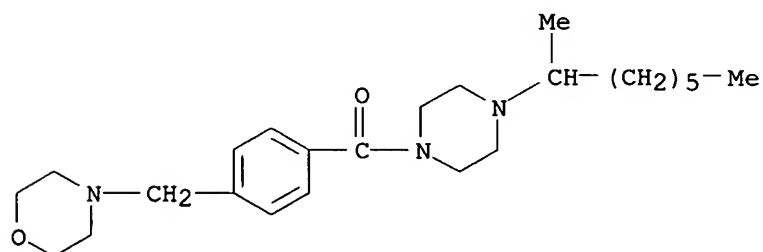
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CN Piperazine, 1-butyl-4-[4-[[[4-(trifluoromethyl)phenyl]amino]methyl]benzoyl]- (9CI) (CA INDEX  
NAME)



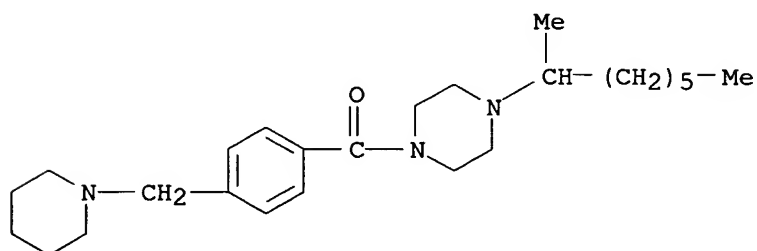
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RN 686720-90-1 CAPLUS

CN Piperazine, 1-(1-methylheptyl)-4-[4-(4-morpholinylmethyl)benzoyl]- (9CI)  
(CA INDEX NAME)

at

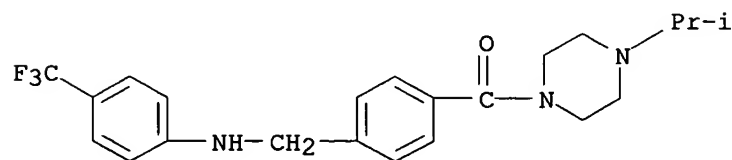
RN 686720-91-2 CAPLUS

CN Piperazine, 1-(1-methylheptyl)-4-[4-(1-piperidinylmethyl)benzoyl]- (9CI)  
(CA INDEX NAME)

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RN 686720-92-3 CAPLUS

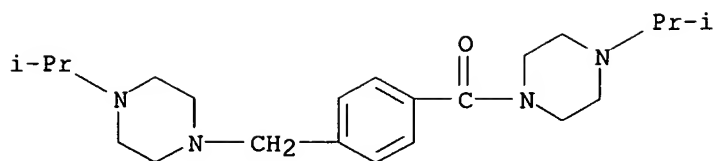
CN Piperazine, 1-(1-methylethyl)-4-[4-[[[4-(trifluoromethyl)phenyl]amino]methyl]benzoyl]- (9CI) (CA INDEX NAME)



z

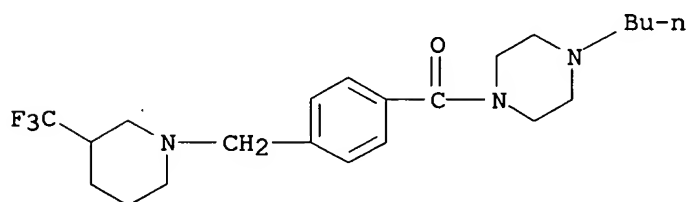
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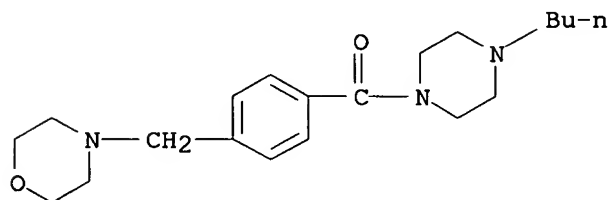
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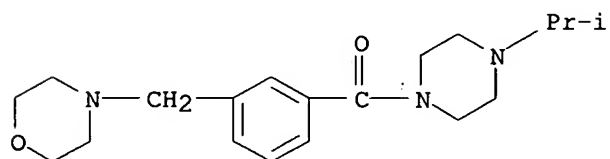
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RN 686720-96-7 CAPLUS

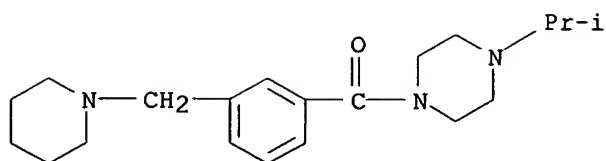
CN Piperazine, 1-(1-methylethyl)-4-[3-(4-morpholinylmethyl)benzoyl]- (9CI) (CA INDEX NAME)



RN 686720-97-8 CAPLUS

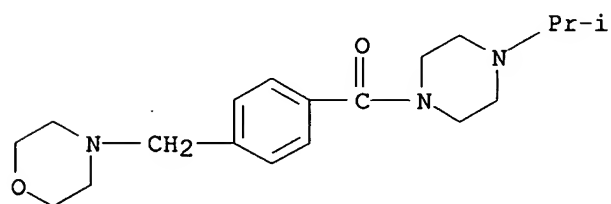
CN Piperazine, 1-(1-methylethyl)-4-[3-(1-piperidinylmethyl)benzoyl]- (9CI) (CA INDEX NAME)





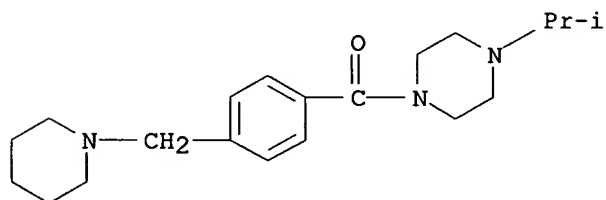
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RN 686720-98-9 CAPLUS

CN Piperazine, 1-(1-methylethyl)-4-[4-(4-morpholinylmethyl)benzoyl]- (9CI)  
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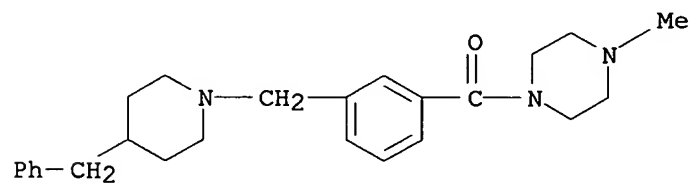
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RN 686720-99-0 CAPLUS

CN Piperazine, 1-(1-methylethyl)-4-[4-(1-piperidinylmethyl)benzoyl]- (9CI)  
(CA INDEX NAME)

r

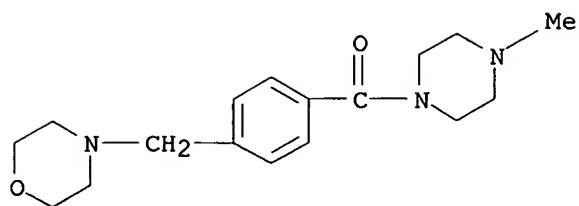
RN 686721-00-6 CAPLUS

CN Piperazine, 1-methyl-4-[3-[[4-(phenylmethyl)-1-piperidinyl]methyl]benzoyl]-  
(9CI) (CA INDEX NAME)

al

RN 686721-01-7 CAPLUS

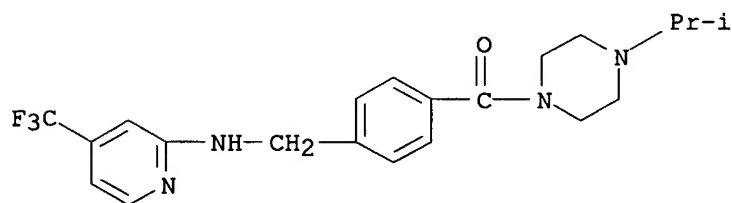
CN Piperazine, 1-methyl-4-[4-(4-morpholinylmethyl)benzoyl]-, dihydrochloride  
(9CI) (CA INDEX NAME)



ad

● 2 HCl

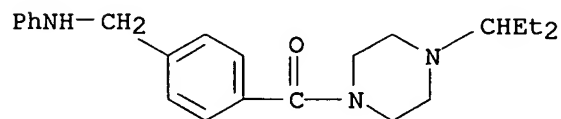
RN 686721-02-8 CAPLUS  
CN Piperazine, 1-(1-methylethyl)-4-[4-[[[4-(trifluoromethyl)-2-pyridinyl]amino]methyl]benzoyl]-, dihydrochloride (9CI) (CA INDEX NAME)



aa

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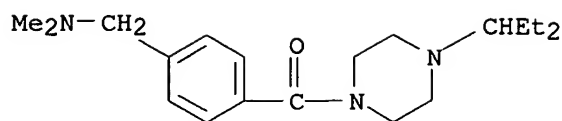
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CN Piperazine, 1-(1-ethylpropyl)-4-[4-[(phenylamino)methyl]benzoyl]-, dihydrochloride (9CI) (CA INDEX NAME)



an

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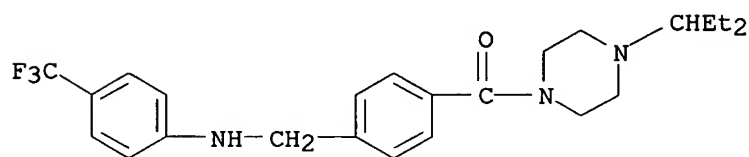
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CN Piperazine, 1-[4-[(dimethylamino)methyl]benzoyl]-4-(1-ethylpropyl)-, dihydrochloride (9CI) (CA INDEX NAME)



2

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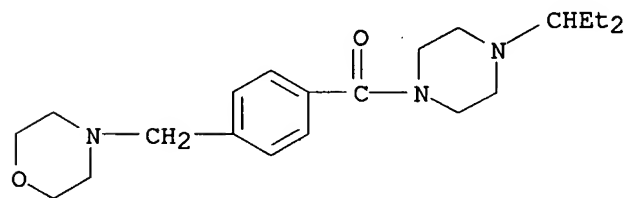
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as

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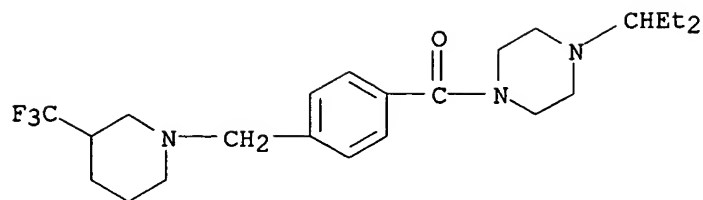
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CN Piperazine, 1-(1-ethylpropyl)-4-[4-(4-morpholinylmethyl)benzoyl]-, dihydrochloride (9CI) (CA INDEX NAME)



am

●2 HCl

RN 686721-07-3 CAPLUS  
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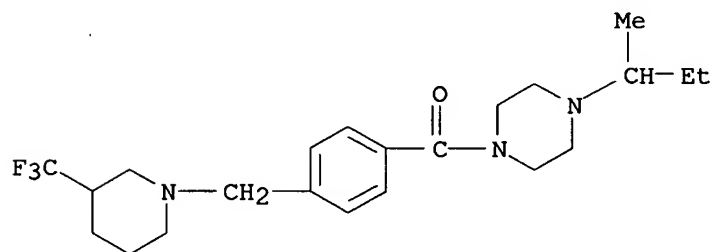


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RN 686721-08-4 CAPLUS

CN Piperazine, 1-(1-methylpropyl)-4-[4-[[3-(trifluoromethyl)-1-piperidinyl]methyl]benzoyl]-, dihydrochloride (9CI) (CA INDEX NAME)

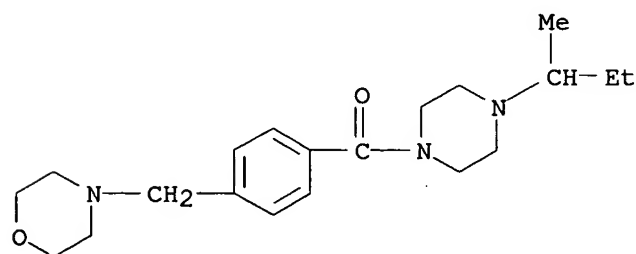


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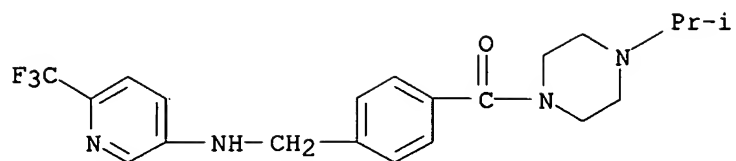


ag

● 2 HCl

RN 686721-10-8 CAPLUS

CN Piperazine, 1-(1-methylethyl)-4-[4-[[[6-(trifluoromethyl)-3-pyridinyl]amino]methyl]benzoyl]-, dihydrochloride (9CI) (CA INDEX NAME)

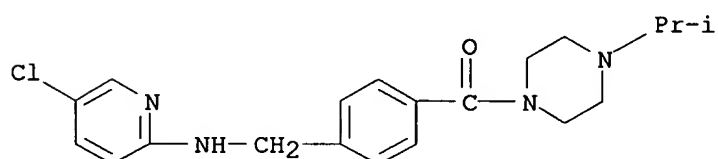


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RN 686721-11-9 CAPLUS

CN Piperazine, 1-[4-[[[5-chloro-2-pyridinyl]amino]methyl]benzoyl]-4-(1-methylethyl)-, dihydrochloride (9CI) (CA INDEX NAME)

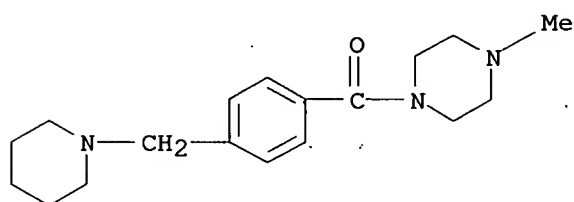


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RN 686721-12-0 CAPLUS

CN Piperazine, 1-methyl-4-[4-(1-piperidinylmethyl)benzoyl]-, dihydrochloride (9CI) (CA INDEX NAME)

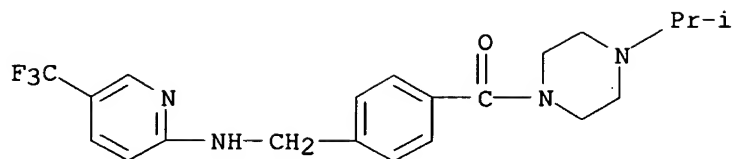


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RN 686721-13-1 CAPLUS

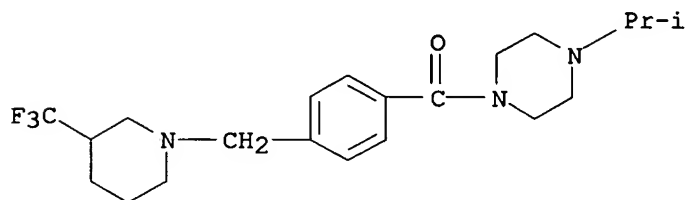
CN Piperazine, 1-(1-methylethyl)-4-[4-[[[5-(trifluoromethyl)-2-pyridinyl]amino]methyl]benzoyl]-, dihydrochloride (9CI) (CA INDEX NAME)



ab

● 2 HCl

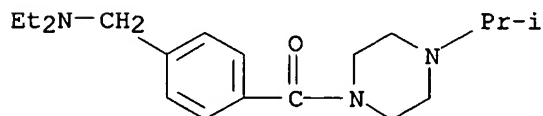
RN 686721-14-2 CAPLUS  
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u

● 2 HCl

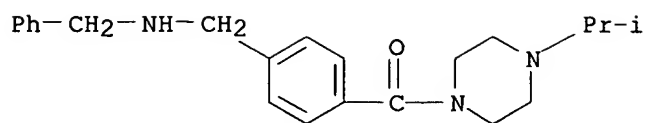
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CN Piperazine, 1-[4-[(diethylamino)methyl]benzoyl]-4-(1-methylethyl)-, dihydrochloride (9CI) (CA INDEX NAME)



j

● 2 HCl

RN 686721-16-4 CAPLUS  
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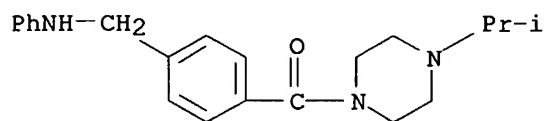


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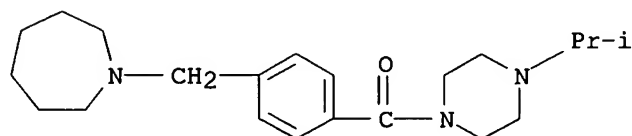


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RN 686721-18-6 CAPLUS

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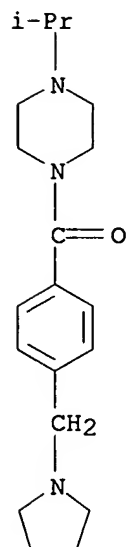


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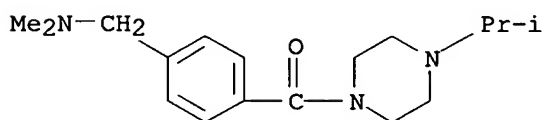


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S

RN 686721-20-0 CAPLUS

CN Piperazine, 1-[4-[(dimethylamino)methyl]benzoyl]-4-(1-methylethyl)-, dihydrochloride (9CI) (CA INDEX NAME)

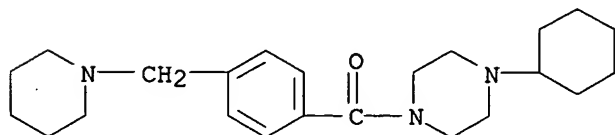


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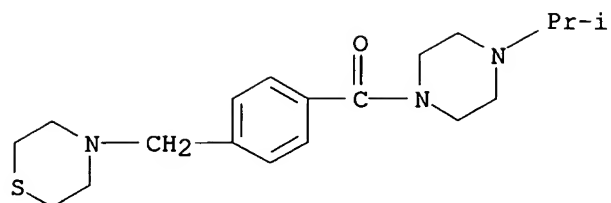


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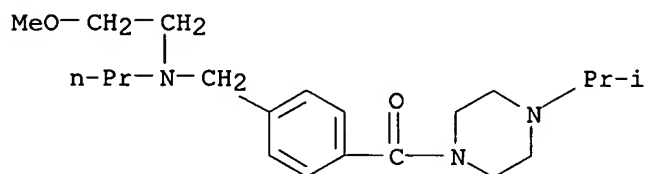


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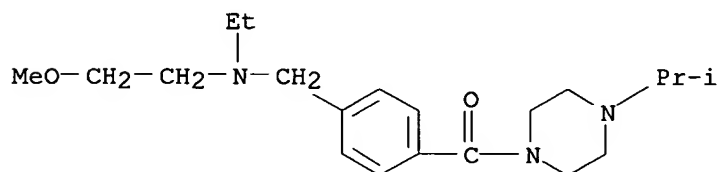
CN Piperazine, 1-[4-[[ (2-methoxyethyl)propylamino]methyl]benzoyl]-4-(1-methylethyl)- (9CI) (CA INDEX NAME)

? o



RN 686721-24-4 CAPLUS

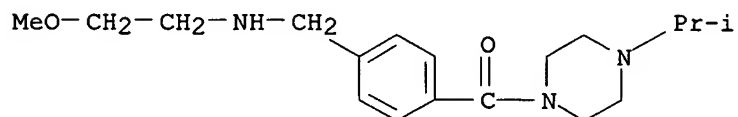
CN Piperazine, 1-[4-[[ethyl (2-methoxyethyl)amino]methyl]benzoyl]-4-(1-methylethyl)- (9CI) (CA INDEX NAME)



Q

RN 686721-25-5 CAPLUS

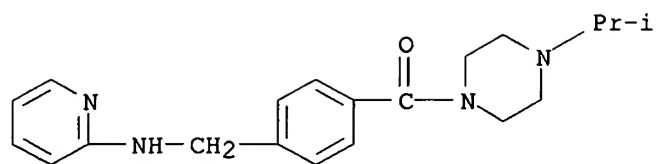
CN Piperazine, 1-[4-[[ (2-methoxyethyl)amino]methyl]benzoyl]-4-(1-methylethyl)- (9CI) (CA INDEX NAME)



w

RN 686721-26-6 CAPLUS

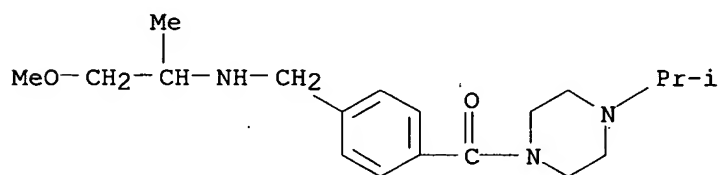
CN Piperazine, 1-(1-methylethyl)-4-[4-[(2-pyridinylamino)methyl]benzoyl]- (9CI) (CA INDEX NAME)



3X

RN 686721-27-7 CAPLUS

CN Piperazine, 1-[4-[[[(2-methoxy-1-methylethyl)amino]methyl]benzoyl]-4-(1-methylethyl)- (9CI) (CA INDEX NAME)



4

~~15~~ ANSWER 15 OF 50 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2004:354923 CAPLUS

DOCUMENT NUMBER: 140:375196

TITLE: Preparation of substituted piperazines, [1,4]diazepines, and 2,5-diazabicyclo[2.2.1]heptanes as histamine H1 and/or H3 antagonists or histamine H3 reverse antagonists

INVENTOR(S): Ancliff, Rachael; Eldred, Colin David; Fogden, Yvonne C.; Hancock, Ashley Paul; Heightman, Thomas Daniel; Hobbs, Heather; Hodgson, Simon Teanby; Lindon, Matthew J.; Wilson, David Matthew

PATENT ASSIGNEE(S): Glaxo Group Limited, UK

SOURCE: PCT Int. Appl., 140 pp.

CODEN: PIXXD2

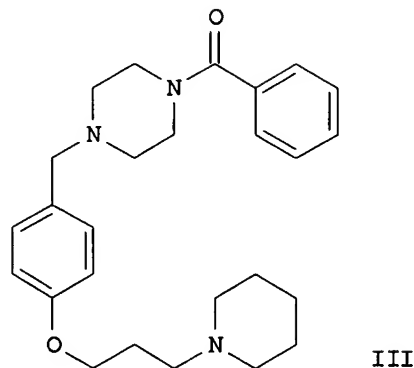
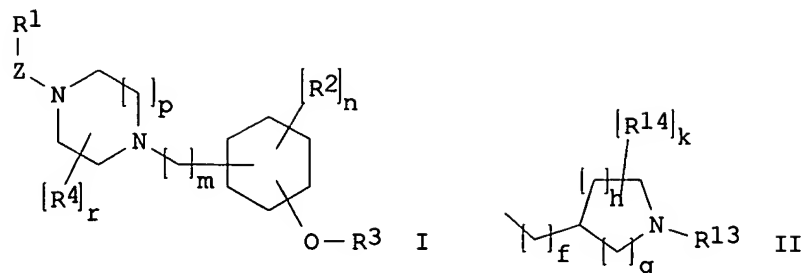
DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004035556	A1	20040429	WO 2003-EP11423	20031014
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
CA 2502249	AA	20040429	CA 2003-2502249	20031014
AU 2003280380	A1	20040504	AU 2003-280380	20031014
BR 2003015283	A	20050830	BR 2003-15283	20031014
EP 1567511	A1	20050831	EP 2003-772221	20031014
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				
CN 1726201	A	20060125	CN 2003-80106014	20031014
JP 2006508935	T2	20060316	JP 2004-544241	20031014
NO 2005001689	A	20050707	NO 2005-1689	20050405
US 2006025404	A1	20060202	US 2005-531758	20050414
PRIORITY APPLN. INFO.:			GB 2002-24084	A 20021016
			WO 2003-EP11423	W 20031014
OTHER SOURCE(S):	MARPAT	140:375196		
GI				



AB The title compds. [I;  $R^1$  = H, alkyl, alkoxy, etc.;  $Z$  = a bond, CO, (un)substituted CONH, SO<sub>2</sub>;  $p$  = 1-2;  $m$ ,  $n$ ,  $r$  = 0-2;  $R^2$  = halo, alkyl, alkoxy, etc.;  $R^3$  = (CH<sub>2</sub>)<sub>q</sub>NR<sup>11</sup>R<sup>12</sup>, II (wherein  $q$  = 2-4;  $R^{11}$ ,  $R^{12}$  = alkyl, cycloalkyl; NR<sup>11</sup>R<sup>12</sup> = heterocyclyl;  $R^{13}$  = H, alkyl, cycloalkyl, etc.;  $R^{14}$  = halo, alkyl, haloalkyl, etc.;  $f$ ,  $k$  = 0-2;  $g$  = 0-2;  $h$  = 0-3, such that  $g$  and  $h$  cannot both be 0);  $R^4$  = H, alkyl such that when  $r$  = 2, two  $R^4$  groups may instead be linked to form CH<sub>2</sub>, (CH<sub>2</sub>)<sub>2</sub>, (CH<sub>2</sub>)<sub>3</sub>; with the provisos], useful in the treatment of neurodegenerative disorders including Alzheimer's disease, and inflammatory diseases of the upper respiratory tract, were prepared. Thus, reacting 1-[4-(3-piperidin-1-ylpropoxy)benzyl]piperazine.3HCl (preparation given) with benzoic acid afforded 77% III which was tested in the histamine H<sub>3</sub> functional antagonist assay and showed pK<sub>B</sub> of > 6.5. The pharmaceutical composition comprising the compound

I is claimed.

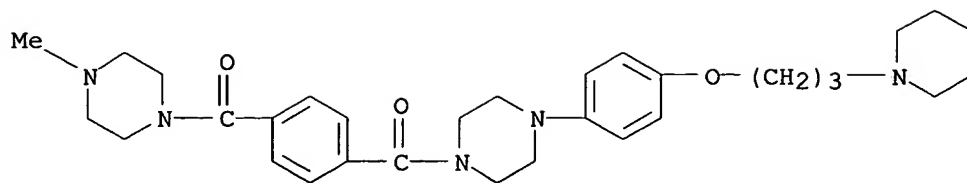
IT **684248-14-4P**

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of substituted piperazines, [1,4]diazepines, and 2,5-diazabicyclo[2.2.1]heptanes as histamine H<sub>1</sub> and/or H<sub>3</sub> antagonists or histamine H<sub>3</sub> reverse antagonists)

RN 684248-14-4 CAPLUS

CN Piperazine, 1-[4-[(4-methyl-1-piperazinyl)carbonyl]benzoyl]-4-[4-[3-(1-piperidinyl)propoxy]phenyl]- (9CI) (CA INDEX NAME)



REFERENCE COUNT:

3

THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS  
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

ANSWER 16 OF 50 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2004:252488 CAPLUS

DOCUMENT NUMBER: 140:287416

TITLE: Preparation of bis(heterocyclylmethyl)amine compounds as chemokine receptor CXCR4 antagonists

INVENTOR(S): Yamazaki, Toru; Kikumoto, Shigeyuki; Ono, Masahiro; Saitou, Atsushi; Takahashi, Haruka; Kumakura, Sei; Hirose, Kunitaka; Yanaka, Mikiro; Takemura, Yoshiyuki; Suzuki, Shigeru; Matsui, Ryo

PATENT ASSIGNEE(S): Kureha Chemical Industry Company, Limited, Japan

SOURCE: PCT Int. Appl., 293 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004024697	A1	20040325	WO 2003-JP11381	20030905
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
CA 2488785	AA	20040325	CA 2003-2488785	20030905
AU 2003261974	A1	20040430	AU 2003-261974	20030905
EP 1550657	A1	20050706	EP 2003-795301	20030905
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				
CN 1646495	A	20050727	CN 2003-808298	20030905
US 2005165063	A1	20050728	US 2003-516158	20030905
JP 3714948	B2	20051109	JP 2004-535901	20030905
PRIORITY APPLN. INFO.:			JP 2002-265247	A 20020911
			WO 2003-JP11381	W 20030905

OTHER SOURCE(S): MARPAT 140:287416

GI

$$A^1 - (CR^1R^2)_{n1}$$

$$N - (CR^5R^6)_{n3} - W - X - D$$

$$A^2 - (CR^3R^4)_{n2} \quad I$$

AB The title compds. [I; n1, n2, n3 = an integer of 0-3; R1-R6 = H, each (un)substituted C1-15 alkyl, C2-15 alkenyl, C2-15 alkynyl, or C3-15 cycloalkyl; A1, A2 = each (un)substituted mono- or polycyclic heteroarom. ring, partially saturated polycyclic heteroarom. ring, mono- or polycyclic aromatic ring, partially saturated aromatic ring, heterocyclic ring, or NH2CH2; W =

each (un)substituted C1-15 alkylene, C2-15 alkenylene, C2-15 alkynylene, C3-15 cycloalkylene, mono- or polycyclic heteroarom. ring, partially saturated polycyclic heteroarom. ring, mono- or polycyclic aromatic ring, partially saturated polycyclic aromatic ring, or heterocyclic ring; X = O, CH<sub>2</sub>, (un)substituted NH; D = Q, Q1, etc.; wherein R13 = H, each (un)substituted C1-15 alkyl, C2-15 alkenyl, C2-15 alkynyl, C3-15 cycloalkyl, (un)substituted amino-C2-4 alkyl] or optically active enantiomers or diastereomers thereof or mixts. or racemates thereof are prepared These compds., e.g. 4-[[bis(1H-imidazol-2-ylmethyl)amino]methyl]-N-(4-dipropylaminomethyl)benzamide (II) and N-(4-dipropylaminomethylphenyl)-4-[[bis(1H-imidazol-2-ylmethyl)-(1H-benzimidazol-1-ylmethyl)amino]methyl]benzamide (III), are efficacious against diseases such as infection with virus (e.g. HIV virus), rheumatism, and cancer metastasis. For example, II and III showed EC<sub>50</sub> of 0.002 μM against the HIV infection of MT-4 cells.

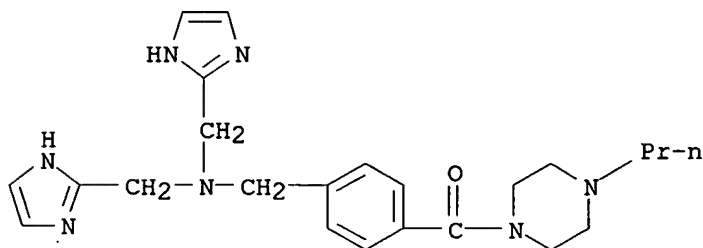
IT 675135-14-5P 675135-19-0P 675135-20-3P  
675137-00-5P 675137-16-3P 675137-17-4P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of bis(heterocyclylmethyl)amine compds. as chemokine receptor CXCR4 antagonists for treatment of infection with virus (e.g. HIV virus), rheumatism, and cancer metastasis)

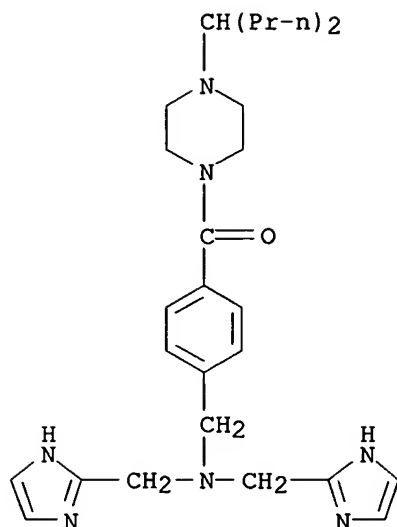
RN 675135-14-5 CAPLUS

CN Piperazine, 1-[4-[[bis(1H-imidazol-2-ylmethyl)amino]methyl]benzoyl]-4-propyl- (9CI) (CA INDEX NAME)



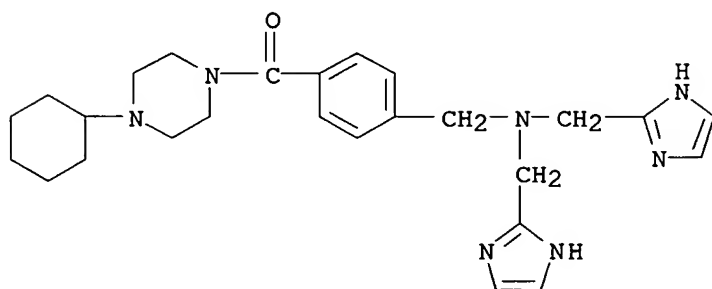
RN 675135-19-0 CAPLUS

CN Piperazine, 1-[4-[[bis(1H-imidazol-2-ylmethyl)amino]methyl]benzoyl]-4-(1-propylbutyl)- (9CI) (CA INDEX NAME)



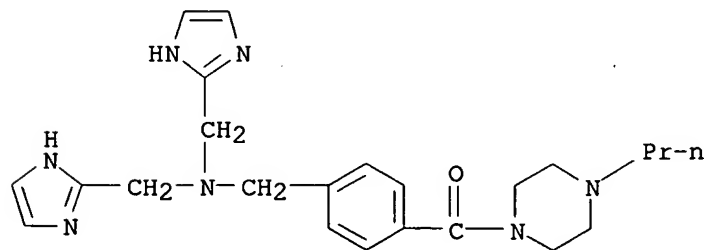
RN 675135-20-3 CAPLUS

CN Piperazine, 1-[4-[[bis(1H-imidazol-2-ylmethyl)amino]methyl]benzoyl]-4-cyclohexyl- (9CI) (CA INDEX NAME)



RN 675137-00-5 CAPLUS

CN Piperazine, 1-[4-[[bis(1H-imidazol-2-ylmethyl)amino]methyl]benzoyl]-4-propyl-, monohydrochloride (9CI) (CA INDEX NAME)



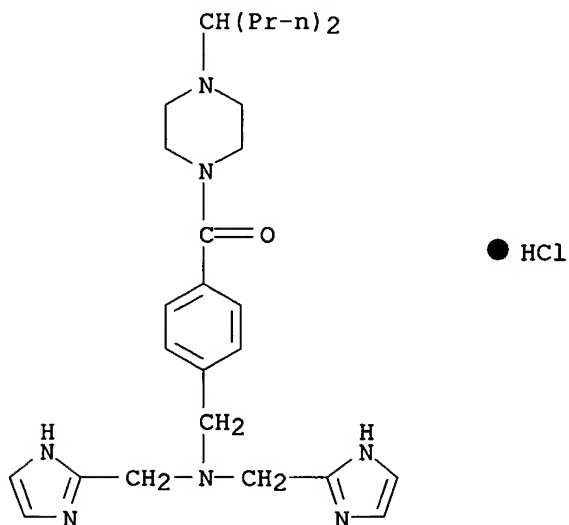
● HCl



10/690,115

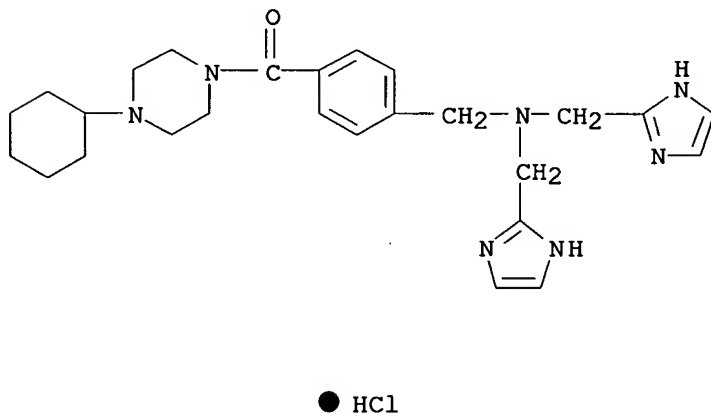
RN 675137-16-3 CAPLUS

CN Piperazine, 1-[4-[[bis(1H-imidazol-2-ylmethyl)amino]methyl]benzoyl]-4-(1-propylbutyl)-, monohydrochloride (9CI) (CA INDEX NAME)



RN 675137-17-4 CAPLUS

CN Piperazine, 1-[4-[[bis(1H-imidazol-2-ylmethyl)amino]methyl]benzoyl]-4-cyclohexyl-, monohydrochloride (9CI) (CA INDEX NAME)



REFERENCE COUNT:

8

THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

~~16~~ ANSWER 17 OF 50 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2004:220336 CAPLUS

DOCUMENT NUMBER: 140:270873

TITLE: Preparation of pyrazolopyrimidines as cyclin-dependent kinase inhibitors

INVENTOR(S): Guzi, Timothy J.; Paruch, Kamil; Dwyer, Michael P.; Doll, Ronald J.; Girijavallabhan, Viyyoor Moopil; Mallams, Alan; Alvarez, Carmen S.; Keertikar, Kartik M.; Rivera, Jocelyn; Chan, Tin-yau; Madison, Vincent; Fischmann, Thierry O.; Dillard, Lawrence W.; Tran, Vinh D.; He, Zhen Min; James, Ray Anthony; Park, Haengsoon; Paradkar, Vidyadhar M.; Hobbs, Douglas Walsh

PATENT ASSIGNEE(S): Schering Corporation, USA; Pharmacoopia, Inc.

SOURCE: PCT Int. Appl., 609 pp.

CODEN: PIXXD2

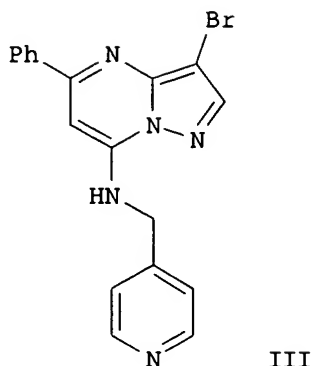
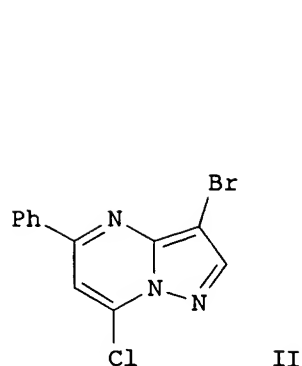
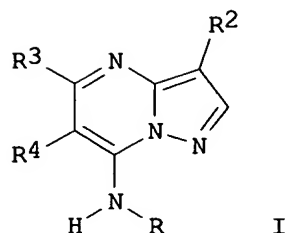
DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 4

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004022561	A1	20040318	WO 2003-US27555	20030903
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, HR, HU, ID, IL, IN, IS, JP, KG, KR, KZ, LC, LK, LR, LT, LU, LV, MA, MD, MG, MK, MN, MX, MZ, NI, NO, NZ, PG, PH, PL, PT, RO, RU, SC, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UZ, VC, VN, YU, ZA, ZM				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
CA 2497440	AA	20040318	CA 2003-2497440	20030903
AU 2003263071	A1	20040329	AU 2003-263071	20030903
EP 1537116	A1	20050608	EP 2003-794592	20030903
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				
BR 2003014001	A	20050705	BR 2003-14001	20030903
JP 2006502163	T2	20060119	JP 2004-534487	20030903
CN 1735614	A	20060215	CN 2003-824997	20030903
NO 2005001647	A	20050603	NO 2005-1647	20050404
PRIORITY APPLN. INFO.:			US 2002-408027P	P 20020904
			US 2002-421959P	P 20021029
			WO 2003-US27555	W 20030903
OTHER SOURCE(S):		MARPAT 140:270873		
GI				



AB The title compds. [I R = H, alkyl, cycloalkyl, etc.; R2 = alkyl, halo, aryl, etc.; R3 = H, halo, aryl, etc.; R4 = H, halo, alkyl], useful as inhibitors of cyclin dependent kinases for treatment, prevention, inhibition, or amelioration of one or more diseases associated with the CDKs such as cancer, were prepared Thus, reacting II (preparation given) with 4-aminomethylpyridine afforded 93% III which showed IC50 of 0.020  $\mu$ M and 0.029  $\mu$ M against CDK2 kinase (cyclin A or cyclin E-dependent). The pharmaceutical composition comprising the compound I is claimed. This is a

Part

I of I-III series.

IT **672321-90-3P 672321-92-5P**

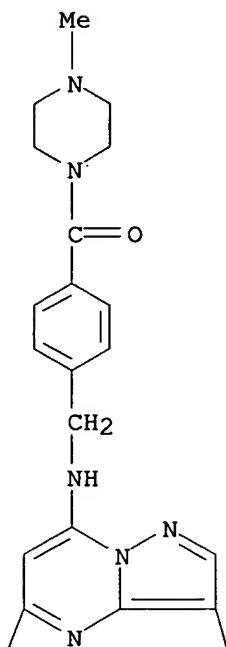
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of pyrazolopyrimidines as cyclin-dependent kinase inhibitors)

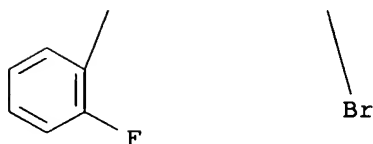
RN 672321-90-3 CAPLUS

CN Piperazine, 1-[4-[[[3-bromo-5-(2-fluorophenyl)pyrazolo[1,5-a]pyrimidin-7-yl]amino]methyl]benzoyl]-4-methyl- (9CI) (CA INDEX NAME)

PAGE 1-A

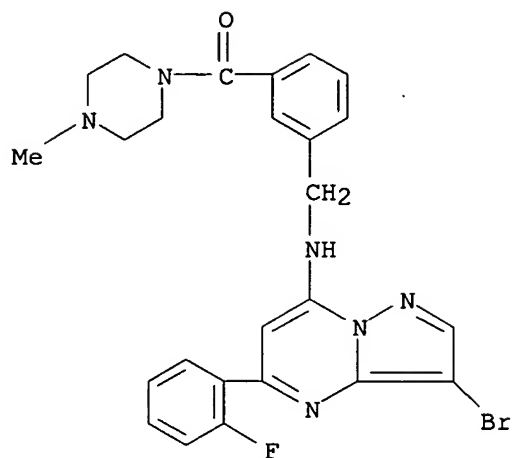


PAGE 2-A



RN 672321-92-5 CAPLUS

CN Piperazine, 1-[3-[[[3-bromo-5-(2-fluorophenyl)pyrazolo[1,5-a]pyrimidin-7-yl]amino]methyl]benzoyl]-4-methyl- (9CI) (CA INDEX NAME)



REFERENCE COUNT:

4

THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS  
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

~~16~~ ANSWER 18 OF 50 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2004:198178 CAPLUS

DOCUMENT NUMBER: 140:235748

TITLE: Preparation of arylquinoazolinones and related compounds as melanin concentrating hormone (MCH) antagonists.

INVENTOR(S): Stenkamp, Dirk; Lehmann-Lintz, Thorsten; Mueller, Stephan; Rudolf, Klaus; Lustenberger, Phillip; Arndt, Kirsten; Lotz, Ralf; Wieland, Heike; Lenter, Martin

PATENT ASSIGNEE(S): Boehringer Ingelheim International G.m.b.H., Germany; Novo Nordisk A/S

SOURCE: Ger. Offen., 132 pp.

CODEN: GWXXBX

DOCUMENT TYPE: Patent

LANGUAGE: German

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 10238865	A1	20040311	DE 2002-10238865	20020824
CA 2496563	AA	20040325	CA 2003-2496563	20030816
WO 2004024702	A1	20040325	WO 2003-EP9099	20030816
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW			
RW:	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG			
AU 2003258620	A1	20040430	AU 2003-258620	20030816
EP 1534689	A1	20050601	EP 2003-794886	20030816
R:	AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK			
BR 2003013790	A	20050712	BR 2003-13790	20030816
CN 1678591	A	20051005	CN 2003-820076	20030816
JP 2006507246	T2	20060302	JP 2004-535098	20030816
US 2004242572	A1	20041202	US 2003-647156	20030822
NO 2005000068	A	20050304	NO 2005-68	20050106
PRIORITY APPLN. INFO.:			DE 2002-10238865	A 20020824
			US 2002-408224P	P 20020904
			WO 2003-EP9099	W 20030816

OTHER SOURCE(S): MARPAT 140:235748

AB R1R2NXYZNR3COAWkB [R1, R2 = H, (substituted) alkyl, cycloalkyl, Ph; R1R2 = (heteroatom-interrupted) (substituted) alkylene; R3 = H, alkyl, cycloalkyl, cycloalkylalkyl, alkoxyalkyl, aminoalkyl; X = bond, (heteroatom-interrupted) (substituted) alkylene; Z = (heteroatom-interrupted) (substituted) alkylene; A, Y = (hetero)cyclylene; B = (hetero)cyclyl; W = bond, O, alkylene, alkenylene, alkynylene, alkyleneoxy, imino, etc.; k = 0, 1; R1Y, R3Z, AR3 = atoms to form rings], were prepared Thus, 4'-chloro-3-aminobiphenyl-4-carboxylic acid [2-(4-pyrrolidin-1-ylmethylphenyl)ethyl]amide (preparation given) was stirred with HCO2H for 3 h at room temperature and for 2 h at 100° to give 64.6% 7-(4-chlorophenyl)-3-[2-(4-pyrrolidin-1-ylmethylphenyl)ethyl]-3H-quinazolin-4-one. Tested I showed MCH-1 binding activity with IC50 =

10/690,115

2.1-30.5 nM.

IT **669003-23-0P**

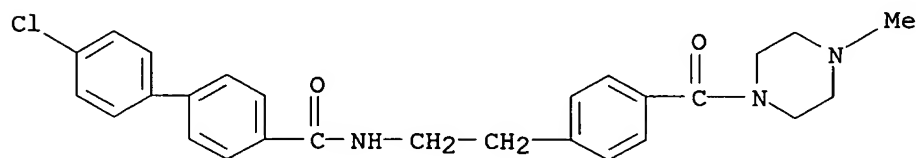
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of arylquinoazolinones and related compds. as melanin concentrating

hormone (MCH) antagonists)

RN 669003-23-0 CAPLUS

CN [1,1'-Biphenyl]-4-carboxamide, 4'-chloro-N-[2-[4-[(4-methyl-1-piperazinyl)carbonyl]phenyl]ethyl]- (9CI) (CA INDEX NAME)



IT **669002-97-5P**

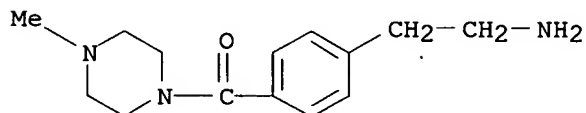
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation of arylquinoazolinones and related compds. as melanin concentrating

hormone (MCH) antagonists)

RN 669002-97-5 CAPLUS

CN Piperazine, 1-[4-(2-aminoethyl)benzoyl]-4-methyl- (9CI) (CA INDEX NAME)



~~16~~ ANSWER 19 OF 50 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2004:60485 CAPLUS

DOCUMENT NUMBER: 140:94063

TITLE: Preparation of new alkynylated quinazoline compounds as MMP-13 inhibitors

INVENTOR(S): Gaudilliere, Bernard; Jacobelli, Henry; Wilson, Michael William; Picard, Joseph Armand

PATENT ASSIGNEE(S): Warner-Lambert Company Llc, USA

SOURCE: PCT Int. Appl., 77 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

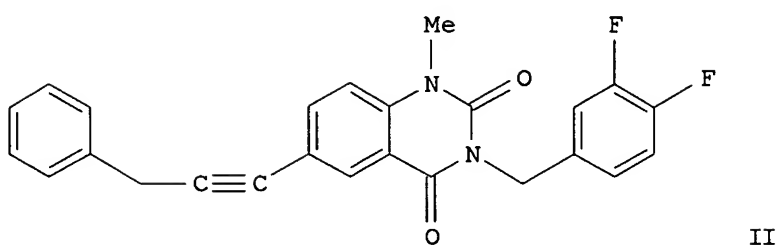
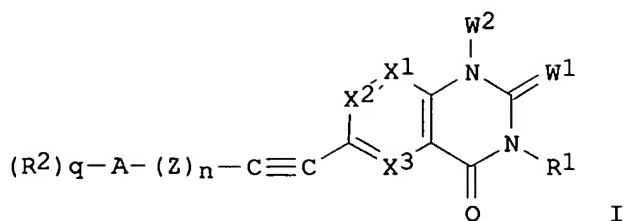
LANGUAGE: English

FAMILY ACC. NUM. COUNT: 3

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004007469	A1	20040122	WO 2002-EP8475	20020712
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW				
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AU 2002331362	A1	20040202	AU 2002-331362	20020712
CA 2463159	AA	20030424	CA 2002-2463159	20021011
WO 2003033478	A1	20030424	WO 2002-EP12194	20021011
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US 2003130278	A1	20030710	US 2002-269197	20021011
US 6962922	B2	20051108		
BR 2002013239	A	20040928	BR 2002-13239	20021011
EP 1465878	A1	20041013	EP 2002-801341	20021011
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, SK				
JP 2005509626	T2	20050414	JP 2003-536218	20021011
US 2005245548	A1	20051103	US 2005-148880	20050609
PRIORITY APPLN. INFO.:			US 2001-329181P	P 20011012
			WO 2001-EP11824	A 20011012
			US 2002-395441P	P 20020712
			WO 2002-EP8475	A 20020712
			US 2002-269197	A1 20021011
			WO 2002-EP12194	W 20021011
OTHER SOURCE(S):		MARPAT 140:94063		
GI				





AB The title compds. I [W1 = O, S, (substituted)amino; W2 = H, CF3, (substituted)amino, alkyl, alkenyl, alkynyl, aryl, etc.; W1W2 = heteroalkylene, etc; X1, X2 and X3 = N or (substituted)carbon; n = 0-8; Z = CR3R4, where R3, R4 = H, alkyl, halogen, (substituted)amino, etc.; A = (hetero)aryl or (hetero)cycloalkyl; R1 = H, alkyl, alkenyl, alkynyl, etc.; R2 = H, alkyl, halogen, cyano, nitro, (substituted)amino, etc.; q = 0-7] were prepared as inhibitors of type-13 matrix metalloprotease. Thus, reaction of 3-(3,4-difluoro-benzyl)-6-iodo-1-methyl-1H-quinazoline-2,4-dione (preparation given) with 3-phenyl-propyne yielded compound II. The IC50 values on MMP-13 of the prepared compds. are all below 10  $\mu$ M.

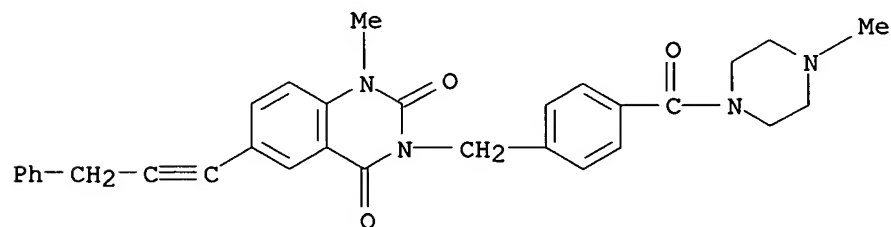
IT **515869-65-5P**

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of alkynylated quinazoline compds. as MMP-13 inhibitors)

RN 515869-65-5 CAPLUS

CN Piperazine, 1-[4-[[1,4-dihydro-1-methyl-2,4-dioxo-6-(3-phenyl-1-propynyl)-3(2H)-quinazolinyl]methyl]benzoyl]-4-methyl- (9CI) (CA INDEX NAME)



10/690,115

REFERENCE COUNT:

9

THERE ARE 9 CITED REFERENCES AVAILABLE FOR THIS  
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

~~10~~ ANSWER 20 OF 50 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2003:737516 CAPLUS

DOCUMENT NUMBER: 139:257284

TITLE: Cathepsin cysteine protease inhibitors and their therapeutic use

INVENTOR(S): Bayly, Christopher I.; Black, Cameron; Leger, Serge; Li, Chun Sing; McKay, Dan; Mellon, Christophe; Gauthier, Jacques Yves; Lau, Cheuk; Therien, Michel; Truong, Vouy-Linh; Green, Michael J.; Hirschbein, Bernard L.; Janc, James W.; Palmer, James T.; Baskaran, Chitra

PATENT ASSIGNEE(S): Merck Frosst Canada & Co., Can.; Axys Pharmaceuticals, Inc.

SOURCE: PCT Int. Appl., 282 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2003075836	A2	20030918	WO 2003-US6147	20030228
WO 2003075836	A3	20040715		
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW			
RW:	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG			
CA 2477657	AA	20030918	CA 2003-2477657	20030228
US 2003232863	A1	20031218	US 2003-377377	20030228
EP 1482924	A2	20041208	EP 2003-716238	20030228
R:	AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK			
BR 2003008208	A	20050111	BR 2003-8208	20030228
CN 1638757	A	20050713	CN 2003-805181	20030228
JP 2005526753	T2	20050908	JP 2003-574112	20030228
US 2005240023	A1	20051027	US 2004-505796	20040825
NO 2004004207	A	20041124	NO 2004-4207	20041004
PRIORITY APPLN. INFO.:			US 2002-361818P	P 20020305
			US 2002-408704P	P 20020906
			WO 2003-US6147	W 20030228

OTHER SOURCE(S): MARPAT 139:257284

AB This invention relates to cysteine protease inhibitors  
 R7(D)nCR6R7NR8CR3R4C(:O)NHCR1R2CN (R1-4 = H, (substituted)C1-6-alkyl or C2-6-alkenyl; R1 and R2 or R3 and R4 may be taken together with the C atom to which they are attached to form a (substituted)C3-8-cycloalkyl or heterocyclic ring; R5 = H, (substituted)C1-6-alkyl; R6 = (substituted)aryl, heteroaryl, C1-6-haloalkyl, arylalkyl, heteroarylalkyl; D = (substituted)C1-3-alkyl, C2-3-alkenyl, C2-3-alkynyl, aryl, heteroaryl, C3-8-cycloalkyl, heterocyclyl; R7 = H, (substituted)C1-6-alkyl, C2-6-alkenyl, C2-6-alkynyl, C1-6-alkyloxy, etc.; R8 = H, C2-6-alkyl) including but not limited to, inhibitors of cathepsins K, L, S and B.

These compds. are useful for treating diseases in which inhibition of bone resorption is indicated, such as osteoporosis.

IT 603140-22-3P 603140-23-4P

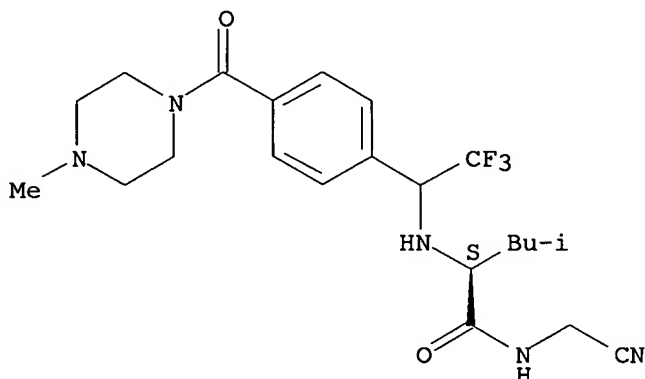
RL: SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(cathepsin cysteine protease inhibitors and their therapeutic use)

RN 603140-22-3 CAPLUS

CN Pentanamide, N-(cyanomethyl)-4-methyl-2-[[2,2,2-trifluoro-1-[4-[(4-methyl-1-piperazinyl)carbonyl]phenyl]ethyl]amino]-, (2S)- (9CI) (CA INDEX NAME)

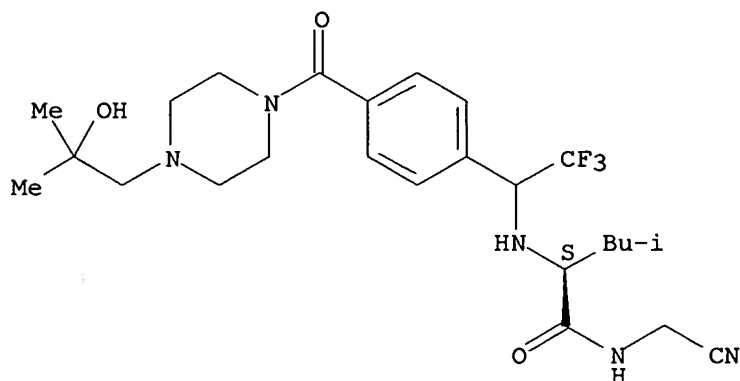
Absolute stereochemistry.



RN 603140-23-4 CAPLUS

CN Pentanamide, N-(cyanomethyl)-4-methyl-2-[[2,2,2-trifluoro-1-[4-[[4-(2-hydroxy-2-methylpropyl)-1-piperazinyl]carbonyl]phenyl]ethyl]amino]-, (2S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

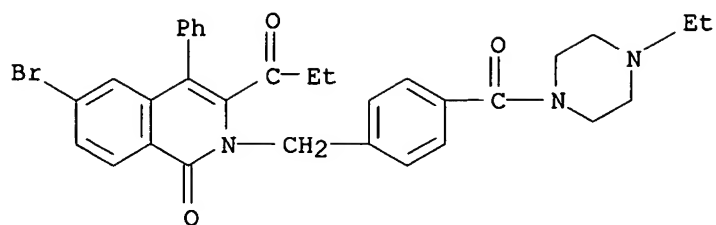


ANSWER 21 OF 50 CAPLUS COPYRIGHT 2006 ACS on STN  
 ACCESSION NUMBER: 2003:656749 CAPLUS  
 DOCUMENT NUMBER: 139:197386  
 TITLE: Preparation of isoquinolinone derivatives as JNK inhibitors  
 INVENTOR(S): Itoh, Fumio; Kimura, Hiroyuki; Igata, Hideki; Kawamoto, Tomohiro; Sasaki, Mitsuru; Kitamura, Shuji  
 PATENT ASSIGNEE(S): Takeda Chemical Industries, Ltd., Japan  
 SOURCE: PCT Int. Appl., 369 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2003068750	A1	20030821	WO 2003-JP1429	20030212
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
CA 2476162	AA	20030821	CA 2003-2476162	20030212
AU 2003211931	A1	20030904	AU 2003-211931	20030212
EP 1484320	A1	20041208	EP 2003-705075	20030212
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				
US 2005148624	A1	20050707	US 2003-504132	20030212
JP 2004143134	A2	20040520	JP 2003-35096	20030213
PRIORITY APPLN. INFO.:			JP 2002-35073	A 20020213
			JP 2002-251997	A 20020829
			WO 2003-JP1429	W 20030212

OTHER SOURCE(S): MARPAT 139:197386  
 AB Claimed are JNK (c-Jun N-terminal kinase) inhibitors containing isoquinolinones or salts thereof. The second claim specifies that said isoquinolinones are 1-isoquinolinones. Compds. of this invention in vitro showed IC50 values of 0.0067  $\mu$ M to 0.095  $\mu$ M against JNK1. Formulations are given.  
 IT **583836-96-8P**  
 RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
 (preparation of isoquinolinone derivs. as JNK inhibitors)  
 RN 583836-96-8 CAPLUS  
 CN Piperazine, 1-[4-[[6-bromo-1-oxo-3-(1-oxopropyl)-4-phenyl-2(1H)-isoquinolinyl]methyl]benzoyl]-4-ethyl- (9CI) (CA INDEX NAME)

10/690,115



REFERENCE COUNT:

14

THERE ARE 14 CITED REFERENCES AVAILABLE FOR THIS  
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

~~DE~~ ANSWER 22 OF 50 CAPLUS COPYRIGHT 2006 ACS on STN

~~RECESSION~~ NUMBER: 2003:656582 CAPLUS

DOCUMENT NUMBER: 139:197371

TITLE: Preparation of substituted pyridinones as modulators of p38 MAP kinase

INVENTOR(S): Devadas, Balekudru; Walker, John; Selness, Shaun R.; Boehm, Terri L.; Durley, Richard C.; Devraj, Rajesh; Hickory, Brian S.; Rucker, Paul V.; Jerome, Kevin D.; Madsen, Heather M.; Alvira, Edgardo; Promo, Michele A.; Bleviss-Bal, Radhika M.; Marrufo, Laura D.; Hitchcock, Jeff; Owen, Thomas; Naing, Win; Xing, Li; Shieh, Huey S.; Sambandam, Aruna; Liu, Shuang; Scott, Ian L.; McGee, Kevin F.

PATENT ASSIGNEE(S): Pharmacia Corporation, USA

SOURCE: PCT Int. Appl., 1052 pp.

CODEN: PIXXD2

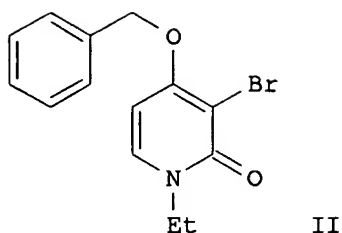
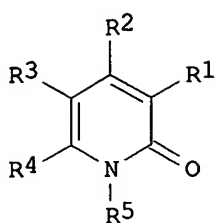
DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2003068230	A1	20030821	WO 2003-US4634	20030214
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
CA 2476012	AA	20030821	CA 2003-2476012	20030214
AU 2003217433	A1	20030904	AU 2003-217433	20030214
US 2004058964	A1	20040325	US 2003-367987	20030214
BR 2003007631	A	20041221	BR 2003-7631	20030214
EP 1490064	A1	20041229	EP 2003-713478	20030214
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CN 1646125	A	20050727	CN 2003-808042	20030214
JP 2005531501	T2	20051020	JP 2003-567412	20030214
ZA 2004006275	A	20051004	ZA 2004-6275	20040805
NO 2004003820	A	20041109	NO 2004-3820	20040913
PRIORITY APPLN. INFO.:			US 2002-357029P	P 20020214
			US 2002-436915P	P 20021230
			WO 2003-US4634	W 20030214
OTHER SOURCE(S):		MARPAT 139:197371		
GI				



AB Disclosed are title compds. I [wherein R1 = H, halo, NO<sub>2</sub>, CHO, CN, CO<sub>2</sub>H, or (un)substituted (halo)alkyl, (aryl)alkoxy, aryl(alkyl), alkenyl, (aryl)alkynyl, (aryl)alkanoyl, alkoxyalkyl, or haloalkoxy; R2 = H, OH, halo, NR<sub>8</sub>R<sub>9</sub>, CO<sub>2</sub>R, or (un)substituted OSO<sub>2</sub>-alkyl, OSO<sub>2</sub>-aryl, arylalkoxy, aryloxy(alkyl), arylthio(alkoxy), arylalkynyl, alkoxy(alkoxy), alkyl, alkynyl, OCONH(CH<sub>2</sub>)<sub>n</sub>-aryl, OCON(alkyl)(CH<sub>2</sub>)<sub>n</sub>-aryl, dialkylamino, (hetero)aryl(alkyl), arylalkenyl, or heterocycloalkyl(alkyl); R3 = H, halo, alkenyl, NR<sub>6</sub>R<sub>7</sub>, NR<sub>6</sub>R<sub>7</sub>-alkyl, alkyl, or (un)substituted (aryl)alkoxycarbonyl, aryloxy(alkoxy), arylalkyl, OCONH(CH<sub>2</sub>)<sub>n</sub>-aryl, arylalkoxy, OCON(alkyl)(CH<sub>2</sub>)<sub>n</sub>-aryl, aryloxy, arylthio, or (aryl)thioalkoxy; R4 = H or (un)substituted alkyl; R5 = H, aryl, aryl(thio)alkyl, NH<sub>2</sub>, alkoxy(alkoxy), alkynyl, SO<sub>2</sub>-alkyl, (hetero)cycloalkyl(alkyl), heteroaryl, or (un)substituted alkyl, alkoxy(alkyl), or alkenyl; R6 and R7 = independently H, OH, or (un)substituted (aryl)alkyl, alkoxy(alkyl), alkanoyl(alkyl), arylalkoxy, SO<sub>2</sub>-alkyl, (aryl)alkoxycarbonyl, heteroarylalkyl, or arylalkanoyl; or NR<sub>6</sub>R<sub>7</sub> = (un)substituted (thio)morpholinyl, pyrrolidinyl, piperidinyl, pyrrolidinyl, or piperazinyl; R8 = independently H or (un)substituted (aryl)alkyl or (aryl)alkanoyl; R9 = H or (un)substituted (aryl)alkyl, (aryl)alkanoyl, cycloalkyl(alkyl), alkenyl, heteroaryl, (alkyl)aminoalkyl, SO<sub>2</sub>Ph, or aryl; R = independently H or (un)substituted alkyl; n = 0-6; and pharmaceutically acceptable salts thereof]. These compds. are useful for treating diseases and conditions caused or exacerbated by unregulated p38 MAP Kinase and/or TNF activity, such as inflammation, ischemia, viral infections, and autoimmune diseases (no data). Pharmaceutical compns. containing I, methods of preparing them, and methods of treatment using the compds. are also disclosed. For example, reaction of 4-benzyloxy-2(1H)-pyridone with EtBr in the presence of K<sub>2</sub>CO<sub>3</sub> in DMF gave II. The latter inhibited MKK6-activated human p38α kinase phosphorylation of a biotinylated substrate or human p38α-induced phosphorylation of EGFRP (epidermal growth factor receptor peptide) with an IC<sub>50</sub> in the range of 1 μM to 25 μM.

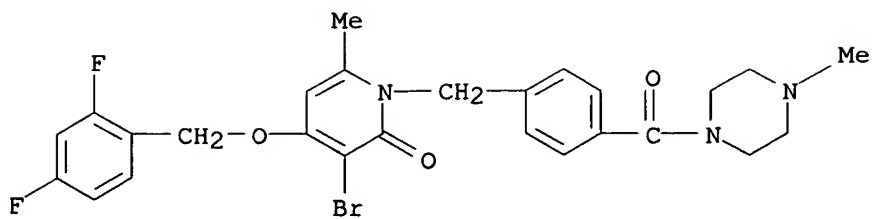
IT **586375-50-0P**, 3-Bromo-4-[(2,4-difluorobenzyl)oxy]-6-methyl-1-[4-[(4-methylpiperazinyl)carbonyl]benzyl]pyridin-2(1H)-one  
 RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(p38 kinase inhibitor; preparation of pyridinones as modulators of p38 MAP kinase for treatment of inflammatory conditions, ischemia, viral infections, autoimmune diseases, and other conditions)

RN 586375-50-0 CAPLUS

CN Piperazine, 1-[4-[[3-bromo-4-[(2,4-difluorophenyl)methoxy]-6-methyl-2-oxo-1(2H)-pyridinyl]methyl]benzoyl]-4-methyl- (9CI) (CA INDEX NAME)





REFERENCE COUNT:

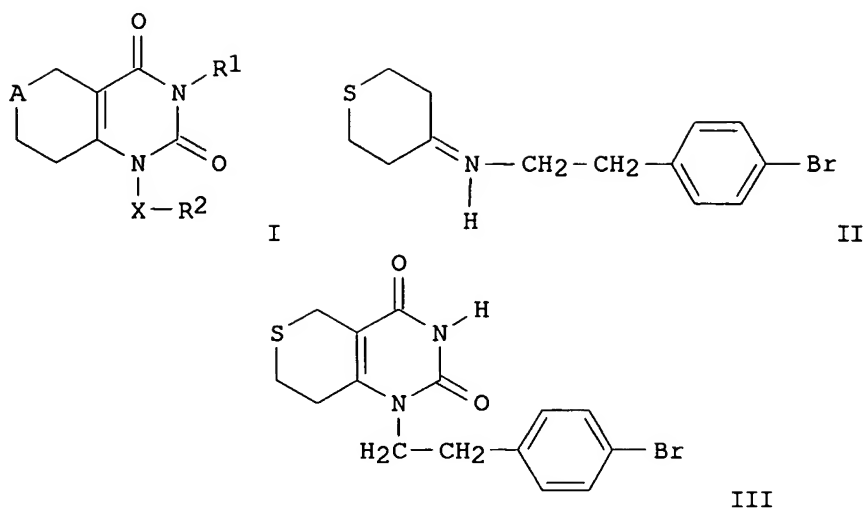
11

THERE ARE 11 CITED REFERENCES AVAILABLE FOR THIS  
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

~~16~~ ANSWER 23 OF 50 CAPLUS COPYRIGHT 2006 ACS on STN  
 ACCESSION NUMBER: 2003:570967 CAPLUS  
 DOCUMENT NUMBER: 139:117436  
 TITLE: Preparation of tetrahydroquinazolinones and related compounds as poly(adenosine diphosphoribose) synthetase inhibitors for the treatment of ischemia and reperfusion injury  
 INVENTOR(S): Albrecht, Barbara; Gerisch, Michael; Haerter, Michael; Krahn, Thomas; Oehme, Felix; Schlemmer, Karl-Heinz; Steinhagen, Henning  
 PATENT ASSIGNEE(S): Bayer Aktiengesellschaft, Germany  
 SOURCE: PCT Int. Appl., 74 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: German  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

*Not prior art*

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2003059892	A1	20030724	WO 2003-EP27	20030103
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
DE 10201240	A1	20030724	DE 2002-10201240	20020115
CA 2473362	AA	20030724	CA 2003-2473362	20030103
AU 2003206694	A1	20030730	AU 2003-206694	20030103
EP 1467975	A1	20041020	EP 2003-704354	20030103
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, SK				
US 2005159431	A1	20050721	US 2003-501033	20030103
PRIORITY APPLN. INFO.:			DE 2002-10201240	A 20020115
			WO 2003-EP27	W 20030103
OTHER SOURCE(S):	MARPAT 139:117436			
GI				



AB Title compds. I [A = CH<sub>2</sub>, O, S; X = alkandiyl (sic), where a methylene group can be replaced by an oxygen; R<sub>1</sub> = H, alkoxy carbonyl; R<sub>2</sub> = (un)substituted aryl, heteroaryl, e.g., NO<sub>2</sub>, halo, CN, etc.] and their pharmaceutically acceptable salts and formulations were prepared For example, condensation of imine II, prepared in situ from 2-(4-bromophenyl)ethylamine and tetrahydro-4H-thiopyran-4-one, and chlorocarbonylisocyanate, afforded tetrahydroquinazolinedione III in 74% yield. In poly(adenosine diphosphoribose) synthetase inhibition assays, 7-examples of compds. I exhibited IC<sub>50</sub> values ranging from 20-800 nM, e.g., the IC<sub>50</sub> value of tetrahydroquinazolinedione III was 60 nM. Compds. I are claimed useful for the treatment of ischemia and reperfusion injury.

IT **564480-98-4P**

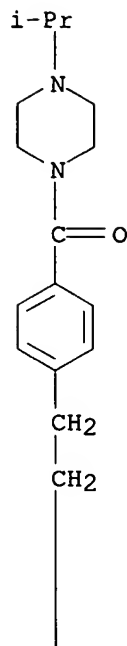
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(drug candidate; preparation of tetrahydroquinazolinediones and related compds. as poly(ADP ribose) synthetase inhibitors for the treatment of ischemia and reperfusion injury)

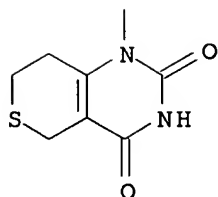
RN 564480-98-4 CAPLUS

CN Piperazine, 1-(1-methylethyl)-4-[4-[2-(3,4,7,8-tetrahydro-2,4-dioxo-2H-thiopyrano[4,3-d]pyrimidin-1(5H)-yl)ethyl]benzoyl]- (9CI) (CA INDEX NAME)

PAGE 1-A



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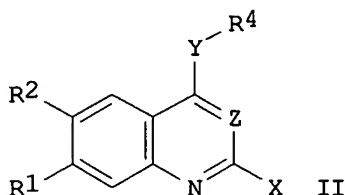
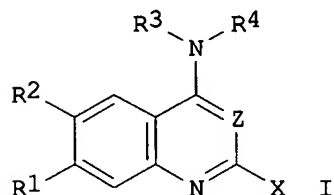
REFERENCE COUNT:

3

THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

16 ANSWER 24 OF 50 CAPLUS COPYRIGHT 2006 ACS on STN  
 X ACCESSION NUMBER: 2003:532653 CAPLUS  
 DOCUMENT NUMBER: 139:101144  
 TITLE: Preparation of quinazolines and quinolines as  
 inhibitors of prolylpeptidase, inducers of apoptosis  
 and cancer treatment agents  
 INVENTOR(S): Dumas, Jacques; Sibley, Robert; Smith, Roger; Su,  
 Ning; Chen, Yuanwei; Wood, Jill; Guernon, Leatte;  
 Dixon, Julie; Brennan, Catherine; Boyer, Stephen  
 PATENT ASSIGNEE(S): Bayer Corporation, USA; et al.  
 SOURCE: PCT Int. Appl., 266 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2003055866	A1	20030710	WO 2002-US41176	20021220
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
AU 2002361846	A1	20030715	AU 2002-361846	20021220
PRIORITY APPLN. INFO.:			US 2001-343112P	P 20011221
			WO 2002-US41176	W 20021220
OTHER SOURCE(S):		MARPAT 139:101144		
GI				



AB The title compds. [I or II; Z = CH, N; Y = O, S; X = OR<sup>5</sup>, NR<sup>5</sup>R<sup>6</sup>; R<sup>1</sup>, R<sup>2</sup> = H, NH<sub>2</sub>, CN, halo, OH, NO<sub>2</sub> (wherein R<sup>1</sup> and R<sup>2</sup> are both not H); R<sup>3</sup> = H, alkyl; R<sup>4</sup> = (CH<sub>2</sub>)<sub>y</sub>R<sup>41</sup> (R<sup>41</sup> = (un)substituted alkyl; y = 0-2)], useful for the inhibiting the prolyl peptidase, inducing apoptosis and treating cancer, were prepared. Thus, reacting 2,4,6-trichloroquinazoline (preparation given) with Me 4-(aminomethyl)benzoate.HCl in the presence of AcONa in H<sub>2</sub>O followed by treating the resulting Me 4-[(2,6-dichloro-4-quinazolinyl)amino]methyl}benzoate with piperidine afforded I [Z = N; X = piperidino; R<sup>1</sup> = H; R<sup>2</sup> = Cl; R<sup>3</sup> = H; R<sup>4</sup> = 4-(MeO<sub>2</sub>C)C<sub>6</sub>H<sub>4</sub>CH<sub>2</sub>]. Most of the exemplified compds. I and II were found to inhibit prolylpeptidase at or below of 10 μM.

10/690,115

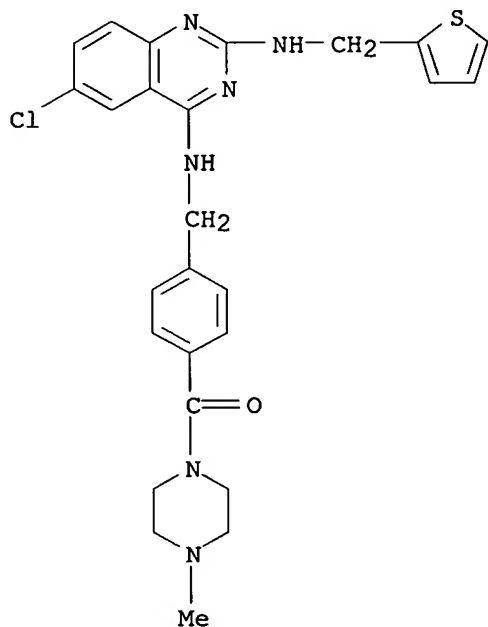
IT **557108-59-5P**

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of quinazolines and quinolines as inhibitors of prolylpeptidase, inducers of apoptosis and cancer treatment agents)

RN 557108-59-5 CAPLUS

CN Piperazine, 1-[4-[[[6-chloro-2-[(2-thienylmethyl)amino]-4-quinazolinyl]amino]methyl]benzoyl]-4-methyl- (9CI) (CA INDEX NAME)



REFERENCE COUNT:

48

THERE ARE 48 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

10/690,115

6 ANSWER 25 OF 50 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2003:389980 CAPLUS

DOCUMENT NUMBER: 138:401612

TITLE: Preparation of carbostyryl derivatives and their use as oxytocin antagonists and therapeutics for treatment of premature delivery, miscarriage, dysmenorrhea, and galactorrhea

INVENTOR(S): Shiraiwa, Masafumi; Ota, Shuji; Takefuchi, Ken; Uchida, Hiroshi; Saegusa, Mamoru; Mitsubori, Tomohiro; Yoshizawa, Masayuki

PATENT ASSIGNEE(S): Teikoku Hormone Mfg. Co., Ltd., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 142 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent

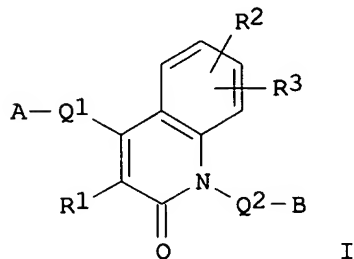
LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2003146972	A2	20030521	JP 2001-348850	20011114
PRIORITY APPLN. INFO.:			JP 2001-348850	20011114
OTHER SOURCE(S):	MARPAT 138:401612			
GI				

not prior art



AB Title derivs. I [Q1 = bond, CH<sub>2</sub>, CH<sub>2</sub>CH<sub>2</sub>, vinyl, CHMe, etc.; A = lower alkyl, (un)substituted cycloalkyl (condensed with hydrocarbyl ring), (un)substituted aryl, (un)substituted heterocyclyl (condensed with hydrocarbyl ring); R1 = H, lower alkyl; R2, R3 = H, (un)substituted lower alkyl(oxy), aralkyloxy, piperidinyl, etc.; R2R3 may be linked to form lower alkylenedioxy; Q2 = bond, CH<sub>2</sub>, CH<sub>2</sub>CH<sub>2</sub>, etc.; B = CO<sub>2</sub>H, lower alkoxy carbonyl, (un)substituted 2-pyridinyl, (un)substituted Ph, (un)substituted cyclohexyl, etc.] or their salts are claimed. The derivs. are also useful for termination of delivery prior to Caesarean section. Thus, 4-(2,3-dimethoxyphenyl)-7-methoxy-2-oxoquinoline was treated with Me 4-bromomethylbenzoate to give 56% I (AQ1 = 2,3-dimethoxyphenyl, R1-R3 = H, Q2B = 4-CH<sub>2</sub>C<sub>6</sub>H<sub>4</sub>CO<sub>2</sub>Me), which inhibited binding of [3H]-oxytocin to its receptor with IC<sub>50</sub> of 0.972 μmol/L.

IT 528822-94-8P 528823-71-4P 528823-72-5P  
528829-38-1P

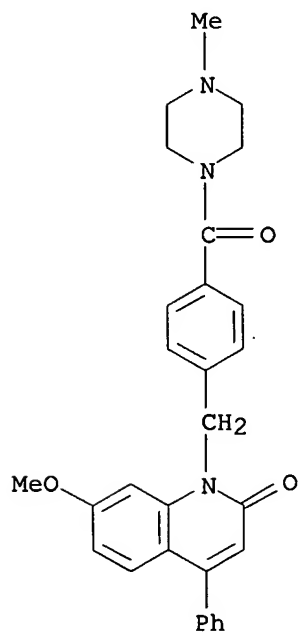
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

10/690,115

(preparation of carbostyryl derivs. as oxytocin antagonists)

RN 528822-94-8 CAPLUS

CN Piperazine, 1-[4-[(7-methoxy-2-oxo-4-phenyl-1(2H)-quinolinyl)methyl]benzoyl]-4-methyl- (9CI) (CA INDEX NAME)

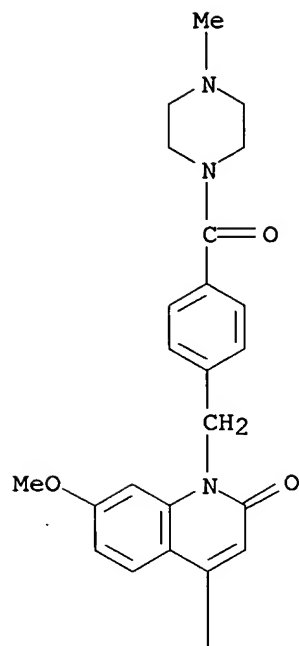


RN 528823-71-4 CAPLUS

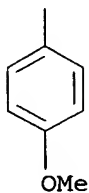
CN Piperazine, 1-[4-[[7-methoxy-4-(4-methoxyphenyl)-2-oxo-1(2H)-quinolinyl)methyl]benzoyl]-4-methyl- (9CI) (CA INDEX NAME)



PAGE 1-A

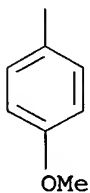
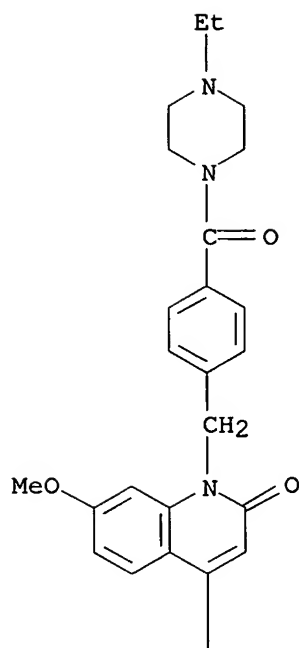


PAGE 2-A



RN 528823-72-5 CAPLUS

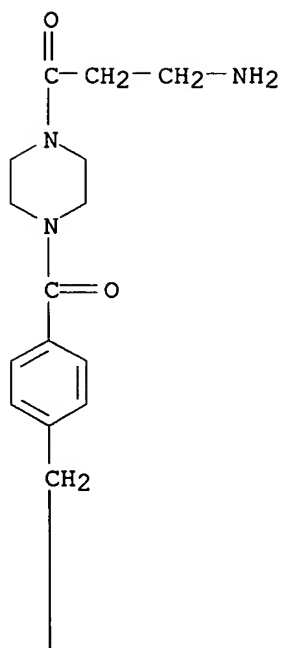
CN Piperazine, 1-ethyl-4-[4-[[7-methoxy-4-(4-methoxyphenyl)-2-oxo-1(2H)-quinolinyl]methyl]benzoyl]- (9CI) (CA INDEX NAME)



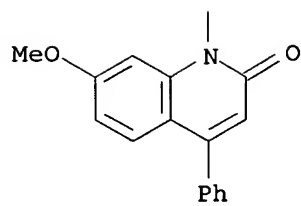
RN 528829-38-1 CAPLUS

CN Piperazine, 1-(3-amino-1-oxopropyl)-4-[4-[(7-methoxy-2-oxo-4-phenyl-1(2H)-quinolinyl)methyl]benzoyl]- (9CI) (CA INDEX NAME)

PAGE 1-A



PAGE 2-A

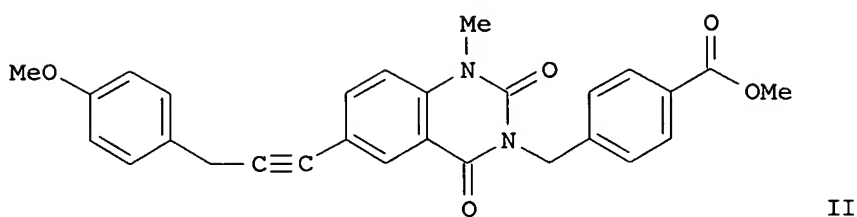
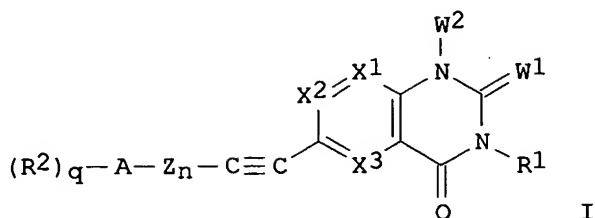


10/690,115  
 ANSWER 26 OF 50 CAPLUS COPYRIGHT 2006 ACS on STN  
 ACCESSION NUMBER: 2003:319883 CAPLUS  
 DOCUMENT NUMBER: 138:338166  
 TITLE: Preparation of alkynylated fused ring pyrimidine  
 compounds as matrix metalloprotease 13 inhibitors  
 INVENTOR(S): Gaudilliere, Bernard; Jacobelli, Henry; Wilson,  
 Michael William; Picard, Joseph Armand  
 PATENT ASSIGNEE(S): Warner-Lambert Company LLC, USA  
 SOURCE: PCT Int. Appl., 99 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 3  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2003033478	A1	20030424	WO 2002-EP12194	20021011
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW			
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WO 2003033477	A1	20030424	WO 2001-EP11824	20011012
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW			
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WO 2004007469	A1	20040122	WO 2002-EP8475	20020712
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RW:	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG			
CA 2463159	AA	20030424	CA 2002-2463159	20021011
BR 2002013239	A	20040928	BR 2002-13239	20021011
EP 1465878	A1	20041013	EP 2002-801341	20021011
R:	AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, SK			
JP 2005509626	T2	20050414	JP 2003-536218	20021011
PRIORITY APPLN. INFO.:			WO 2001-EP11824	A 20011012
			WO 2002-EP8475	A 20020712

OTHER SOURCE(S):  
GI

MARPAT 138:338166



AB Title compds. I [wherein A = (hetero)aryl or (hetero)cycloalkyl; W1 = O, S, or NR3; W2 = H, CF3, NH2, (di)alkylamino, or (un)substituted (cycloalkyl)alkyl, alkenyl, (hetero)aryl, arylalkyl, or heterocyclalkyl; or W1W2 = NX4=W3; W3 = N or CR5; X1-X3 = independently N or (un)substituted C; X4 = N or CR7; X5 = O, S, NH, or N-alkyl; X6 = bond, CH2, O, or SO0-2; Z = CR12R13; R1 = H, alkyl, alkenyl, alkynyl, or (un)substituted (hetero)aryl or (hetero)cycloalkyl; R2 = independently H, (trihalo)alkyl, halo, CN, NO2, (CH2)kNR10R11, OR14, SR14, SO2R14, acyl, X5(CH2)kNR10R11 (CH2)kSO2NR14R15, X5(CH2)kCO2R14, (CH2)kCO2R14, X5(CH2)kCONR14R15, (CH2)kCONR14R15 X6R16, and trialkylsiloxy; R3 = H, alkyl, OH, or CN; R4 = H or alkyl; R5 = H, OR6, SR6, or (un)substituted (cyclo)alkyl, (hetero)aryl, arylalkyl, or heterocyclalkyl; R6, R8, and R9 = H or (aryl)alkyl; R7 = H, NR8R9, OR8, SR8, or (un)substituted (cyclo)alkyl, (hetero)aryl, arylalkyl, or heterocyclalkyl; R10 and R11 = independently H, (hydroxy)alkyl, or arylalkyl; or NR10R11 = (un)substituted heterocyclalkyl; R12 and R13 = independently H, (trihalo)alkyl, halo, NH2, (di)alkylamino, OR4, SR4, or CO2R4; R14 and R15 = independently H or alkyl; R16 = (un)substituted (hetero)aryl or (hetero)cycloalkyl; k = 0-3; n = 0-8; q = 0-7; with provisos; or isomers, N-oxides, or pharmaceutically acceptable salts thereof] were prepared as specific inhibitors of type 13 matrix metalloprotease (MMP-13). For example, reaction of Me 4-(aminomethyl)benzoate•HCl with 2-amino-5-iodobenzoic acid using DEC•HCl and TEA in DMF provided the amide (70%). Cyclization using 1,1'-carbonyldiimidazole in THF gave the quinazoline (99.5%), which was methylated using MeI in the presence of K2CO3 in DMF to afford Me 4-(6-iodo-1-methyl-2,44-dioxo-1,4-dihydro-2H-quinazolin-3-ylmethyl)benzoate (64.2%). Substitution with 3-(4-methoxyphenyl)prop-1-yne catalyzed by Pd(PPh3)2Cl2 and CuI in TEA gave II (6%). Invention compds. inhibited the proteolysis of a peptide substrate with MMP-13 with IC50 values <10 μM, generally 100 times

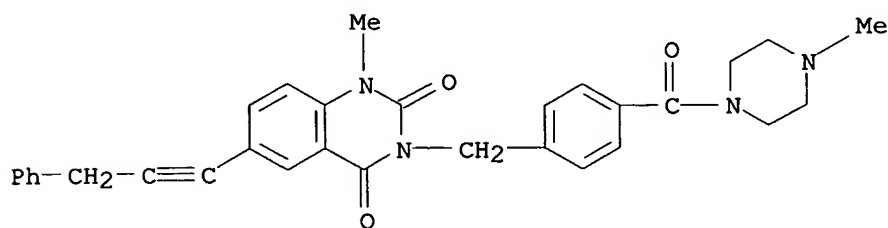
lower than the IC50 values for the same compds. with respect to MMP-1, MMP-2, MMP-3, MMP-7, MMP-9, MMP-12, and MMP-14. Thus, I are useful for the treatment of arthritis, cancer, and other diseases mediated by MMP-13 (no data).

IT **515869-65-5P**, 1-Methyl-3-[4-[(4-methylpiperazin-1-yl)carbonyl]benzyl]-6-(3-phenylprop-1-ynyl)-1H-quinazoline-2,4-dione  
 RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(MMP-13 inhibitor; preparation of alkynylated fused ring pyrimidines as MMP-13 inhibitors for treatment of arthritis, cancer, and other MMP-13 mediated diseases)

RN 515869-65-5 CAPLUS

CN Piperazine, 1-[4-[[1,4-dihydro-1-methyl-2,4-dioxo-6-(3-phenyl-1-propynyl)-3(2H)-quinazolinyl]methyl]benzoyl]-4-methyl- (9CI) (CA INDEX NAME)



REFERENCE COUNT:

11

THERE ARE 11 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

16 ANSWER 27 OF 50 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2002:832781 CAPLUS

DOCUMENT NUMBER: 137:337905

TITLE: Preparation of piperazino phthalazinone derivatives and their use as PDE4 inhibitors

INVENTOR(S): Hatzelmann, Armin; Bundschuh, Daniela; Barsig, Johannes; Kley, Hans-Peter; Grundler, Gerhard; Schmidt, Beate; Sterk, Geert Jan

PATENT ASSIGNEE(S): Altana Pharma A.-G., Germany

SOURCE: PCT Int. Appl., 42 pp.

CODEN: PIXXD2

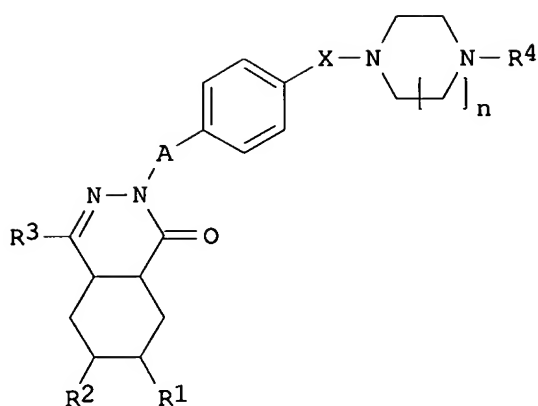
DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002085885	A1	20021031	WO 2002-EP4494	20020424
W: AE, AL, AU, BA, BG, BR, CA, CN, CO, CU, CZ, DZ, EC, EE, GE, HR, HU, ID, IL, IN, IS, JP, KR, LT, LV, MA, MK, MX, NO, NZ, PH, PL, RO, SG, SI, SK, TN, UA, US, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR				
CA 2445236	AA	20021031	CA 2002-2445236	20020424
EP 1385838	A1	20040204	EP 2002-740498	20020424
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
EE 200300513	A	20040216	EE 2003-513	20020424
CN 1505624	A	20040616	CN 2002-808772	20020424
BR 2002009076	A	20040810	BR 2002-9076	20020424
JP 2004526785	T2	20040902	JP 2002-583412	20020424
NZ 529363	A	20050826	NZ 2002-529363	20020424
BG 108187	A	20040930	BG 2002-108187	20020923
US 2004132721	A1	20040708	US 2003-475656	20031023
US 7022696	B2	20060404		
NO 2003004804	A	20031229	NO 2003-4804	20031027
ZA 2003008931	A	20040609	ZA 2003-8931	20031117
JP 2006096766	A2	20060413	JP 2005-336182	20051121
PRIORITY APPLN. INFO.:			EP 2001-110227	A 20010425
			JP 2002-583412	A3 20020424
			WO 2002-EP4494	W 20020424
OTHER SOURCE(S):			MARPAT 137:337905	
GI				



AB Piperazino phthalazinone derivs. [I; wherein R1, R2 = H, or together form an addnl. bond; R3 = (substituted) aryl, (substituted) benzofuran; A = a bond, CH2; X = C(O), S(O)2; n = 1, 2; R4 = alkylcarbonyl, aryl, hetaryl, phenylprop-1-en-3-yl, 1-methylpiperidin-4-yl] were prepared For example, (4aS,8aR)-4-(3,4-diethoxyphenyl)-2-{4-[1-(4-phenylpiperazin-1-yl)methanoyl]phenyl}-4a,5,8,8a-tetrahydro-2H-phthalazin-1-one hydrochloride was prepared by a multistep synthetic procedure. The prepared compds. are useful as PDE4 inhibitors and, in particular, in the treatment of respiratory tract inflammation disorders.

IT **474001-85-9P**

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

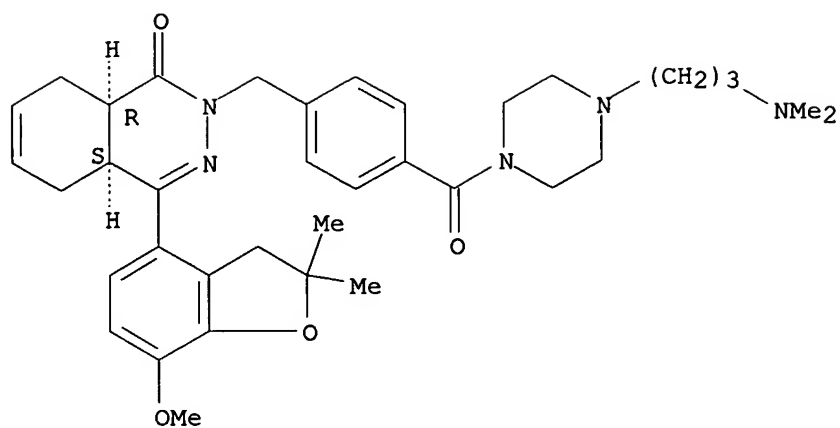
(preparation of piperazino phthalazinone derivs. and their use as PDE4 inhibitors)

RN 474001-85-9 CAPLUS

CN 1-Piperazinepropanamine, 4-[4-[(4aR,8aS)-4-(2,3-dihydro-7-methoxy-2,2-dimethyl-4-benzofuranyl)-4a,5,8,8a-tetrahydro-1-oxo-2(1H)-phthalazinyl]methyl]benzoyl]-N,N-dimethyl-, dihydrochloride, rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.





● 2 HCl

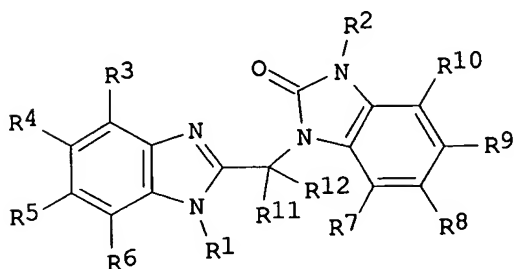
REFERENCE COUNT:

10

THERE ARE 10 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

16 ANSWER 28 OF 50 CAPLUS COPYRIGHT 2006 ACS on STN  
 ACCESSION NUMBER: 2002:256041 CAPLUS  
 DOCUMENT NUMBER: 136:294826  
 TITLE: Preparation of benzimidazolone antiviral agents  
 INVENTOR(S): Yu, Kuo-Long; Civiello, Rita; Combrink, Keith;  
 Gulgeze, Hatice Belgin; Pearce, Bradley C.; Wang,  
 Xiangdong; Meanwell, Nicholas A.; Zhang, Yi  
 PATENT ASSIGNEE(S): Bristol-Myers Squibb Company, USA  
 SOURCE: PCT Int. Appl., 216 pp.  
 CODEN: PIXXD2.  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002026228	A1	20020404	WO 2001-US29493	20010927
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
US 6506738	B1	20030114	US 2001-952736	20010914
PRIORITY APPLN. INFO.:			US 2000-235804P	P 20000927
OTHER SOURCE(S):		MARPAT 136:294826		
GI				



AB The title compds. [I; R1 = (CRvRw)nX; Rv, Rw = H, (halo)alkyl, (halo)alkenyl; X = H, (un)substituted alkyl, alkenyl; n = 1-6; R2 = H, alkyl, Ph, etc.; R3, R6, R7, R10 = H; R5, R8, R9 = H, halo, CF3; R4 = H, halo, CN, etc.; R11, R12 = H], useful in the treatment of viral infections, more particularly, for the treatment of respiratory syncytial virus infection, were prepared E.g., a 4-step synthesis of I [R1 = CH2CH2CHMe2; R2 = C(:CH2)Me; R3-R12 = H], starting with 2-(chloromethyl)benzimidazole, was given. The title compds. I showed antiviral activity against RSV with EC50's between 50  $\mu$ M and 0.001  $\mu$ M.

IT 406943-38-2P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES

10/690,115

(Uses)

(preparation of benzimidazolone antiviral agents)

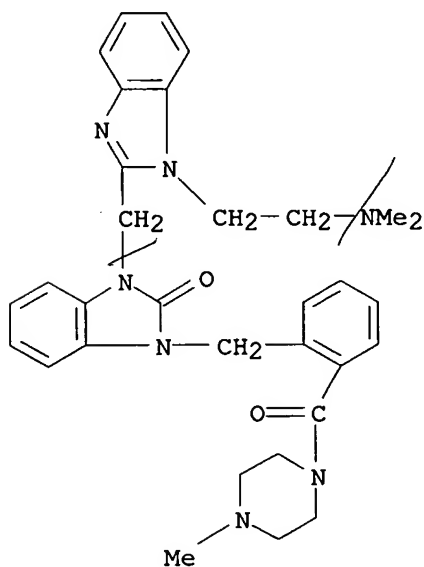
RN 406943-38-2 CAPLUS

CN Piperazine, 1-[2-[[3-[[1-[2-(dimethylamino)ethyl]-1H-benzimidazol-2-yl]methyl]-2,3-dihydro-2-oxo-1H-benzimidazol-1-yl]methyl]benzoyl]-4-methyl-, tris(trifluoroacetate) (9CI) (CA INDEX NAME)

CM 1

CRN 406943-37-1

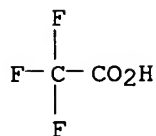
CMF C32 H37 N7 O2



CM 2

CRN 76-05-1

CMF C2 H F3 O2



REFERENCE COUNT:

1

THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

16 ANSWER 29 OF 50 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2001:453092 CAPLUS  
 DOCUMENT NUMBER: 135:61555  
 TITLE: Preparation of lipopeptides as antibacterial agents  
 INVENTOR(S): Hill, Jason; Parr, Ian; Morytko, Michael; Siedlecki, Jim; Yu, Xiang Yang; Silverman, Jared; Keith, Dennis; Finn, John; Christensen, Dale; Lazarova, Tsvetelina; Watson, Alan D.; Zhang, Yan  
 PATENT ASSIGNEE(S): Cubist Pharmaceuticals, Inc., USA; et al.  
 SOURCE: PCT Int. Appl., 202 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001044274	A1	20010621	WO 2000-US34205	20001215
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
CA 2394350	AA	20010621	CA 2000-2394350	20001215
BR 2000016467	A	20020827	BR 2000-16467	20001215
EP 1246838	A1	20021009	EP 2000-991867	20001215
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
JP 2003517480	T2	20030527	JP 2001-544763	20001215
US 2004067878	A1	20040408	US 2000-737908	20001215
NO 2002002887	A	20020812	NO 2002-2887	20020617
ZA 2002005108	A	20031117	ZA 2002-5108	20020625
PRIORITY APPLN. INFO.:			US 1999-170946P	P 19991215
			US 2000-208222P	P 20000530
			WO 2000-US34205	W 20001215
OTHER SOURCE(S):			MARPAT 135:61555	
GI				

\* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT \*

AB Lipopeptides I [R is -N(B)(X)n-A; B is X'RY, H, alkyl, alkenyl, alkynyl, aryl, heteroaryl, cycloalkyl or heterocyclyl; RY is hydrido, alkyl, alkenyl, alkynyl, aryl, heteroaryl, cycloalkyl, heterocyclyl or hydroxyl; X, X' are C:O, C:S, C:NH, C:NRX, S:O or SO<sub>2</sub>; n is 0 or 1; RX is alkyl, alkenyl, alkynyl, aryl, heteroaryl, cycloalkyl, heterocyclyl, hydroxyl, alkoxy, carboxy or carboalkoxy; A is H, NH<sub>2</sub>, NHRA, NRARB, heteroaryl, cycloalkyl, heterocyclyl (RA, RB are alkyl, alkenyl, alkynyl, aryl, heteroaryl, cycloalkyl, heterocyclyl or carboalkoxy) or when n is 0, then A is P(O)(OR<sub>50</sub>)OR<sub>51</sub>, P(O)R<sub>52</sub>R<sub>53</sub>, or P(O)(OR<sub>50</sub>)R<sub>53</sub>, where R<sub>50</sub>-R<sub>53</sub> are alkyl; alternatively B and A may form a 5-7 membered heterocyclic or

heteroaryl ring; R1 is defined similarly to R (with provisos); R2 is CH<sub>2</sub>CR<sub>17</sub>R<sub>18</sub>-ring, where R<sub>17</sub> and R<sub>18</sub> are hydrido, halo, hydroxyl, alkoxy, amino, thio, sulfinyl, sulfonyl, etc. or CR<sub>17</sub>R<sub>18</sub> are CO, C(:S), oxime or hydrazone group] were prepared for use as antibacterials. Thus, treating daptomycin with 4-fluorobenzaldehyde and sodium triacetoxyborohydride in dry DMF for 24 h afforded I [R = NHCO(CH<sub>2</sub>)<sub>8</sub>Me, R<sub>1</sub> = NHCH<sub>2</sub>C<sub>6</sub>H<sub>4</sub>F-4, R<sub>2</sub> = CH<sub>2</sub>COC<sub>6</sub>H<sub>4</sub>NH<sub>2</sub>-o], which showed MIC (S. Aureus) ≤ 1 µg/mL.

IT **345645-29-6P**

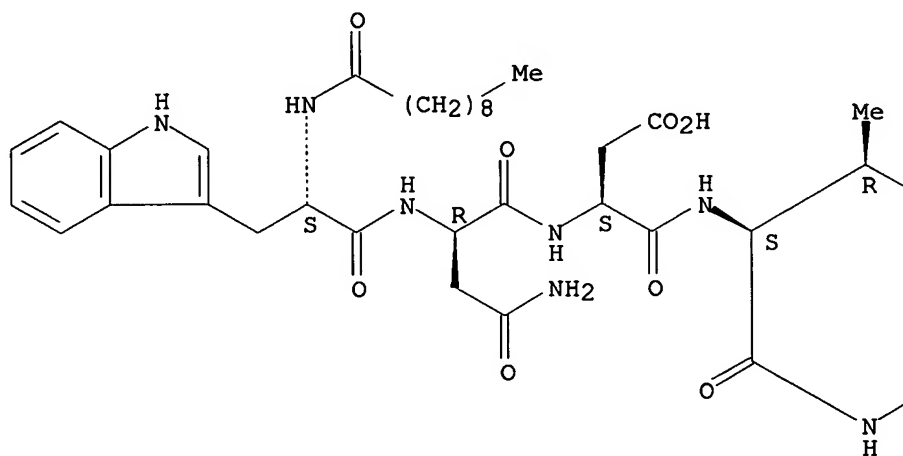
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
(preparation of lipopeptides as antibacterial agents)

RN 345645-29-6 CAPLUS

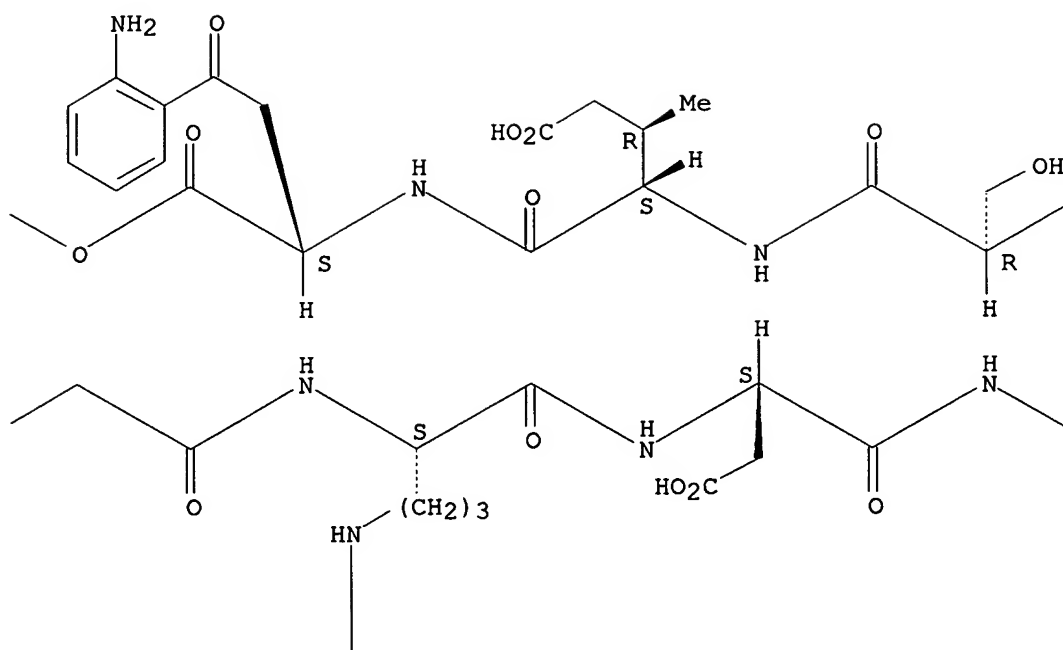
CN Daptomycin, 6-[N5-[[4-[[4-(3-phenyl-2-propenyl)-1-piperazinyl]carbonyl]phenyl]methyl]-L-ornithine]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.  
Double bond geometry unknown.

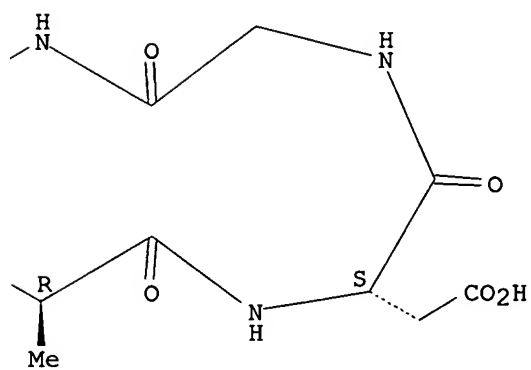
PAGE 1-A



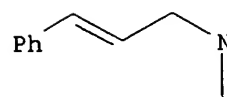
PAGE 1-B



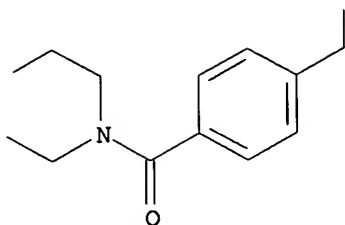
PAGE 1-C



PAGE 2-A



PAGE 2-B



REFERENCE COUNT:

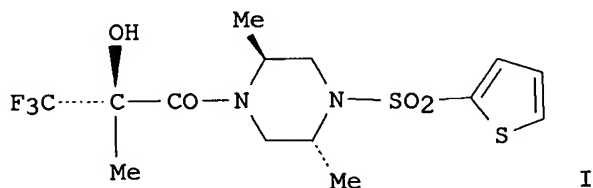
3

THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS  
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

16 ANSWER 30 OF 50 CAPLUS COPYRIGHT 2006 ACS on STN  
 X ACCESSION NUMBER: 2001:185706 CAPLUS  
 DOCUMENT NUMBER: 134:237497  
 TITLE: N-Acyl heterocycles as inhibitors of pyruvate dehydrogenase  
 INVENTOR(S): Butlin, Roger John; Pease, Janet Elizabeth; Block, Michael Howard; Nowak, Thorsten; Burrows, Jeremy Nicholas; Clarke, David Stephen  
 PATENT ASSIGNEE(S): Astrazeneca AB, Swed.; Astrazeneca UK Ltd.  
 SOURCE: PCT Int. Appl., 54 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001017942	A1	20010315	WO 2000-GB3297	20000830
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			
RW:	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG			
EP 1214287	A1	20020619	EP 2000-954797	20000830
R:	AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL			
JP 2003508509	T2	20030304	JP 2001-521689	20000830
US 6878712	B1	20050412	US 2002-69995	20000830
PRIORITY APPLN. INFO.:			GB 1999-20821	A 19990904
			GB 1999-29835	A 19991218
			WO 2000-GB3297	W 20000830

OTHER SOURCE(S): MARPAT 134:237497  
 GI



AB Title compds. such as (2S,2'R,5R)-I were prepared as inhibitors of pyruvate dehydrogenase. Thus, 150 mg (R)-[(2S,5R)-2,5-dimethyl-1-(3,3,3-trifluoro-2-hydroxy-2-methylpropionyl)piperazine] was stirred with 129 mg 2-thiophenesulfonyl chloride and 0.125 mL Et<sub>3</sub>N in 25 mL EtOAc 4 h at ambient temperature to give 71 mg-(2S,2'R,5R)-I. Pharmaceutical formulations were given.



10/690,115

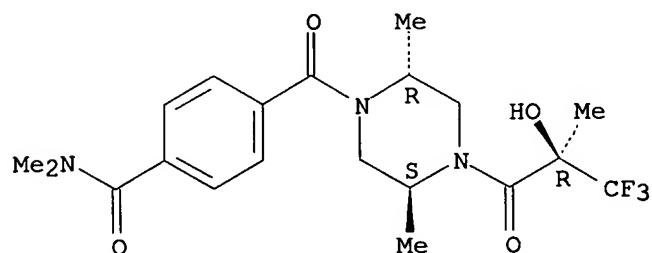
IT 329794-60-7P

RL: SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
(N-acyl heterocycles as inhibitors of pyruvate dehydrogenase)

RN 329794-60-7 CAPLUS

CN Benzamide, 4-[[[(2R,5S)-2,5-dimethyl-4-[(2R)-3,3,3-trifluoro-2-hydroxy-2-methyl-1-oxopropyl]-1-piperazinyl]carbonyl]-N,N-dimethyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



REFERENCE COUNT:

3

THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

10/690,115

10 ANSWER 31 OF 50 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2000:218572 CAPLUS

DOCUMENT NUMBER: 132:260701

TITLE: Tricyclic compounds, their preparation, and cyclic GMP phosphodiesterase inhibitors

INVENTOR(S): Tsuburai, Shogo; Doi, Takayuki; Tarui, Naoki

PATENT ASSIGNEE(S): Takeda Chemical Industries, Ltd., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 71 pp.

CODEN: JKXXAF

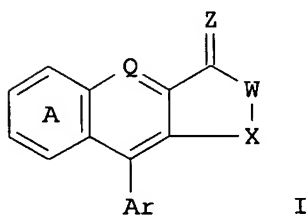
DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2000095759	A2	20000404	JP 1999-204103	19990719
PRIORITY APPLN. INFO.:			JP 1998-204963	A 19980721
OTHER SOURCE(S):	MARPAT	132:260701		
GI				



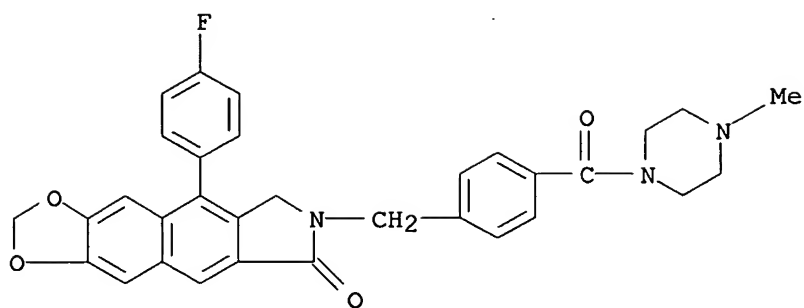
AB Title inhibitors contain tricyclic compds. I [ring A = (substituted) benzene ring; W = (substituted) NH; Q = CR, N; R = H, (substituted) alkyl, (substituted) alkoxy; X = (substituted) C1-2 alkylene; Z = H<sub>2</sub>, O; Ar = (substituted) aromatic hydrocarbonyl, (substituted) aromatic heterocyclyl] or their salts. (6-Bromo-1,3-benzodioxol-5-yl)methanol (4.0 g) was treated with BuLi followed by 2.3 g 4-FC<sub>6</sub>H<sub>4</sub>CN in THF/hexane at room temperature for 2 h and treated with 3.5 g maleimide and p-MeC<sub>6</sub>H<sub>4</sub>SO<sub>3</sub>H in PhMe under reflux for 15 h to give 5.6 g I (ring A = 1,3-benzodioxole, W = NH, Q = CH, X = CO, Z = O, Ar = C<sub>6</sub>H<sub>4</sub>F-p). I (ring A = 1,3-benzodioxole, W = 4-pyridylmethylimino, Q = CH, X = CH<sub>2</sub>, Z = O, Ar = C<sub>6</sub>H<sub>4</sub>F-p) in vitro inhibited recombinant human phosphodiesterase with IC<sub>50</sub> of 8.3 nM. Formulation examples are given.

IT 263019-07-4P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
(preparation of tricyclic compds. as cyclic GMP phosphodiesterase inhibitors)

RN 263019-07-4 CAPLUS

CN Piperazine, 1-[4-[[5-(4-fluorophenyl)-6,8-dihydro-8-oxo-7H-1,3-benzodioxolo[5,6-f]isoindol-7-yl]methyl]benzoyl]-4-methyl-, monohydrochloride (9CI) (CA INDEX NAME)



● HCl

10 ANSWER 32 OF 50 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2000:96024 CAPLUS

DOCUMENT NUMBER: 132:137409

TITLE: Preparation of tryptase inhibitors

INVENTOR(S): Rice, Ken Duane; Dener, Jeffrey Mark; Gangloff, Anthony Robert; Kuo, Elaine Yee-lin

PATENT ASSIGNEE(S): AXYS Pharmaceuticals, Inc., USA

SOURCE: U.S., 27 pp., Cont.-in-part of U.S. Ser. No. 312,269, abandoned.

CODEN: USXXAM

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 6022969	A	20000208	US 1995-522157	19950914
CA 2200561	AA	19960328	CA 1995-2200561	19950914
CN 1160398	A	19970924	CN 1995-195191	19950914
HU 77770	A2	19980828	HU 1997-2059	19950914
ZA 9508028	A	19960418	ZA 1995-8028	19950922
IL 115405	A1	20020725	IL 1995-115405	19950922
HR 950499	B1	20030430	HR 1995-950499	19950922
TW 442478	B	20010623	TW 1995-84110031	19950926
LT 4234	B	19971027	LT 1997-65	19970410
LV 11865	B	19980120	LV 1997-70	19970422
US 6211228	B1	20010403	US 1999-280227	19990329
PRIORITY APPLN. INFO.:			US 1994-312269	B2 19940923
			US 1995-522157	A3 19950914

OTHER SOURCE(S): MARPAT 132:137409

AB (ZX1X2X3X4X5)2Y [X1 = (oxa)alkylene, phenylene-interrupted alkylene, etc.; X2,X4 = CO, CO2, OCO2, CONH, etc.; X3 = alkylene, X9X10, X10X9, etc.; X5,X9 = alkylene; X10,Y = (hetero)cycloalkylene; Z = NH2, NHC(:NH)NH2, C(:NH)NH2] were prepared Thus, trans-cyclohexanedimethanol was bisesterified by OCNCH2CO2Et and the saponified product bisamidated by 4-(H2N)C6H4CH2NH2 to give, after NCNH2 N-acylation, Y[CH2O2CNHCH2CONHCH2C6H4[NHC(:NH)NH2]-4]2 (Y = trans-1,4-cyclohexylene). Data for biol. activity of title inhibitors were given.

IT 256649-60-2P

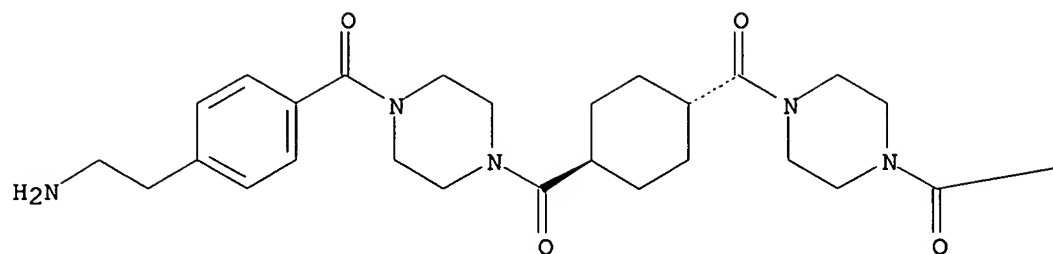
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
(preparation of tryptase inhibitors)

RN 256649-60-2 CAPLUS

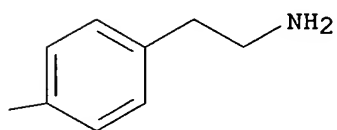
CN Piperazine, 1,1'-(trans-1,4-cyclohexanediylldicarbonyl)bis[4-[4-(2-aminoethyl)benzoyl]- (9CI) (CA INDEX NAME)

Relative stereochemistry.

PAGE 1-A



PAGE 1-B



REFERENCE COUNT:

27

THERE ARE 27 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

10/690,115  
 L6 ANSWER 33 OF 50 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1999:531015 CAPLUS

DOCUMENT NUMBER: 131:184976

TITLE: Preparation of nitrogen-containing heterocyclic compounds on apoptosis inhibition

INVENTOR(S): Nakamura, Takeshi; Isoshima, Hirotaka; Maruhashi, Junji; Baba, Masanori

PATENT ASSIGNEE(S): Japan Tobacco, Inc., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 85 pp.

CODEN: JKXXAF

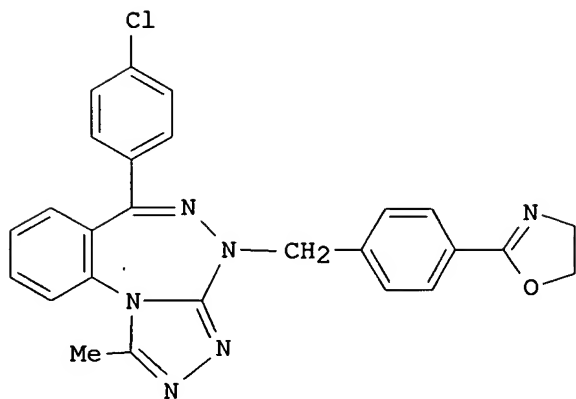
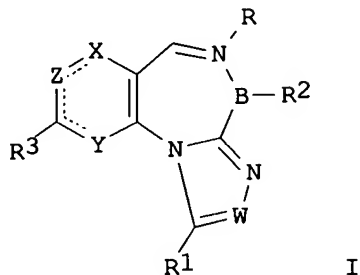
DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 11228576	A2	19990824	JP 1997-365239	19971218
PRIORITY APPLN. INFO.:			JP 1997-362071	A 19971210
OTHER SOURCE(S):	MARPAT	131:184976		
GI				



AB Title compds. [I; R = 4-ClC<sub>6</sub>H<sub>4</sub>, C<sub>6</sub>H<sub>5</sub>, C<sub>6</sub>H<sub>4</sub>CH<sub>2</sub> 4-BrC<sub>6</sub>H<sub>4</sub>, 2-ClC<sub>6</sub>H<sub>4</sub>, 4-(CH<sub>3</sub>)<sub>3</sub>OCOC<sub>6</sub>H<sub>4</sub>, 4-MeOCOC<sub>6</sub>H<sub>4</sub>, 4-MeOC<sub>6</sub>H<sub>4</sub>, 4-HOCC<sub>6</sub>H<sub>4</sub>, 4-(CH<sub>3</sub>)<sub>3</sub>CONHC<sub>6</sub>H<sub>4</sub>, 4-H<sub>2</sub>NC<sub>6</sub>H<sub>4</sub>, 4-CH<sub>3</sub>N(C<sub>6</sub>H<sub>5</sub>)CONHC<sub>6</sub>H<sub>4</sub>; B = N, CH; W = CH, N; R<sub>1</sub> = H, CH<sub>3</sub>; R<sub>3</sub> = H, CH<sub>3</sub>, CH<sub>3</sub>CH<sub>2</sub>; X = CH, electron pair; Z = CH, CH<sub>3</sub>C; Y = CH, S; R<sub>2</sub> = 4-MeOC<sub>6</sub>H<sub>4</sub>CH<sub>2</sub>, 4-CH<sub>3</sub>N(Ac)C<sub>6</sub>H<sub>4</sub>CH<sub>2</sub>, 4-CH<sub>3</sub>SO<sub>2</sub>C<sub>6</sub>H<sub>4</sub>CH<sub>2</sub>, 4-(CH<sub>3</sub>)<sub>2</sub>NCOC<sub>6</sub>H<sub>4</sub>CH<sub>2</sub>,

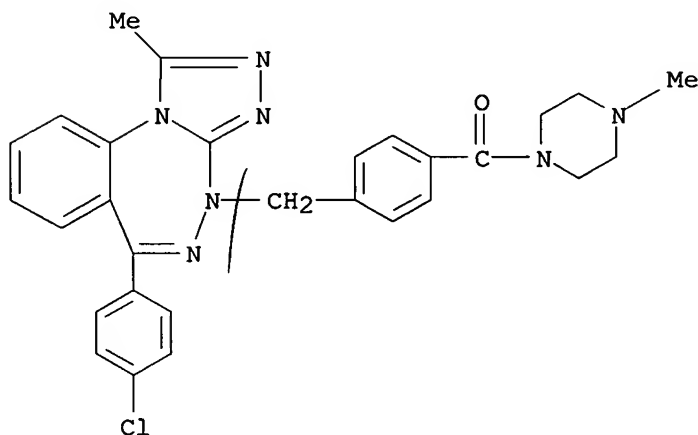
(CH<sub>3</sub>CH<sub>2</sub>)<sub>2</sub>NCOC<sub>6</sub>H<sub>4</sub>CH<sub>2</sub>, (CH<sub>3</sub>CH<sub>2</sub>CH<sub>2</sub>)<sub>2</sub>NCOC<sub>6</sub>H<sub>4</sub>CH<sub>2</sub>, 4-MeOCOC<sub>6</sub>H<sub>4</sub>CH<sub>2</sub>, 4-MeSC<sub>6</sub>H<sub>4</sub>CH<sub>2</sub>, CHCHCH<sub>2</sub>, NCCH<sub>2</sub>, (MeO)<sub>2</sub>CH(CH<sub>2</sub>)<sub>2</sub>, 4-NO<sub>2</sub>C<sub>6</sub>H<sub>4</sub>CH<sub>2</sub>, 4-CNC<sub>6</sub>H<sub>4</sub>CH<sub>2</sub>, 4-BrC<sub>6</sub>H<sub>4</sub>CH<sub>2</sub>, 4-ClC<sub>6</sub>H<sub>4</sub>CH<sub>2</sub>, 3,4-(Cl)<sub>2</sub>C<sub>6</sub>H<sub>3</sub>CH<sub>2</sub>, 4-FC<sub>6</sub>H<sub>4</sub>CH<sub>2</sub>, 4-HOCC<sub>6</sub>H<sub>4</sub>CH<sub>2</sub>, 4-C<sub>6</sub>H<sub>5</sub>C<sub>6</sub>H<sub>4</sub>CH<sub>2</sub>, 4-arylC<sub>6</sub>H<sub>4</sub>CH<sub>2</sub>; dotted bond = single, double in relationship to X, Y, Z], pharmaceutical acceptable salts, and N-oxides are prepared and tested as Fas inhibitors in blocking the apoptosis on prevention and treatment of diseases such as antiviral drugs on AIDS. Thus, the title compound II was prepared

IT **239125-79-2P**

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
(preparation of heterocyclic compds. as antiviral drugs)

RN 239125-79-2 CAPLUS

CN Piperazine, 1-[4-[[6-(4-chlorophenyl)-1-methyl-4H-[1,2,4]triazolo[4,3-a][1,3,4]benzotriazepin-4-yl]methyl]benzoyl]-4-methyl- (9CI) (CA INDEX NAME)



16 ANSWER 34 OF 50 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1999:439350 CAPLUS

DOCUMENT NUMBER: 131:73667

TITLE: Preparation of piperazinylterephthalamides as antivirals.

INVENTOR(S): Yoon, Sung Joon; Chung, Yong Ho; Lee, Sang Wook; Sim, Hyeong Su; Park, Yong Kyun; Kim, Jong Woo; Huh, Yong; Yoon, Jae In; Park, Sang Jin

PATENT ASSIGNEE(S): Dong Wha Pharm. Ind. Co. Ltd., S. Korea

SOURCE: U.S., 29 pp.

CODEN: USXXAM

DOCUMENT TYPE: Patent

LANGUAGE: English

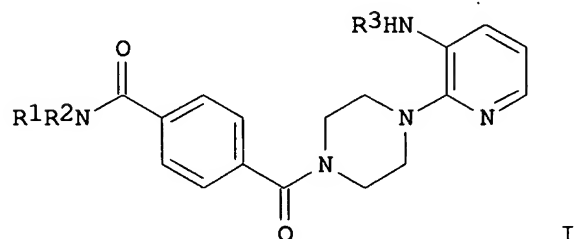
FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 5922871	A	19990713	US 1997-956948	19971023
PRIORITY APPLN. INFO.:			KP 1997-9720957	A 19970527
			KP 1997-9720958	A 19970527
			KP 1997-9723289	A 19970605
			KP 1997-9736589	A 19970731

OTHER SOURCE(S): MARPAT 131:73667

GI



AB Title compds. [I; R1, R2 = H, Ph, PhCH2, (substituted) alkyl; R1R2 = atoms to form a 5-6 membered (substituted) heterocyclyl; R3 = alkyl], were prepared Thus, 4-[1-[3-(isopropylamino)-2-pyridyl]piperazin-4-ylcarbonyl]benzoic acid (preparation given) in CH2Cl2 was treated sequentially with Et3N, pivaloyl chloride, Et3N, and 2-aminoethanol to give 80% I (R1 = H; R2 = HOCH2CH2; R3 = Me2CH). The latter inhibited hepatitis B virus reverse transcriptase by 53% at 0.1 µg/mL.

IT 216759-25-0P 216759-26-1P 216759-27-2P

216759-29-4P 216759-30-7P 216759-31-8P

216759-32-9P 216759-33-0P

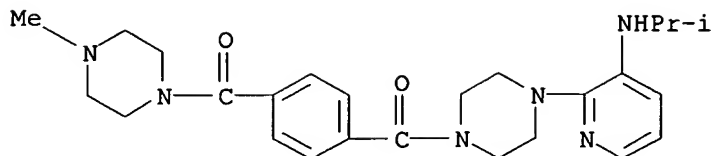
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of piperazinylterephthalamides as antivirals)

RN 216759-25-0 CAPLUS

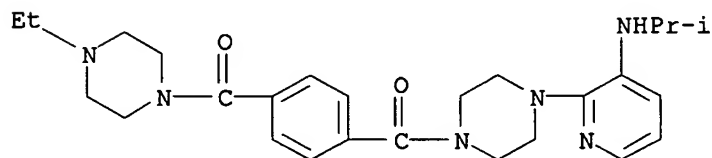
CN Piperazine, 1-[3-[(1-methylethyl)amino]-2-pyridinyl]-4-[4-[(4-methyl-1-piperazinyl)carbonyl]benzoyl]- (9CI) (CA INDEX NAME)





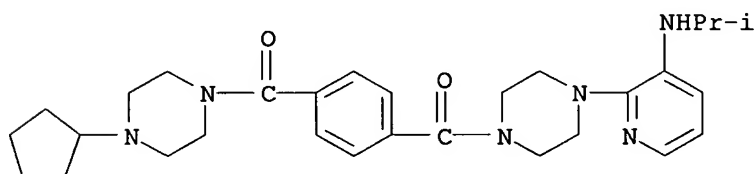
RN 216759-26-1 CAPLUS

CN Piperazine, 1-ethyl-4-[4-[[4-[3-[(1-methylethyl)amino]-2-pyridinyl]-1-piperazinyl]carbonyl]benzoyl]- (9CI) (CA INDEX NAME)



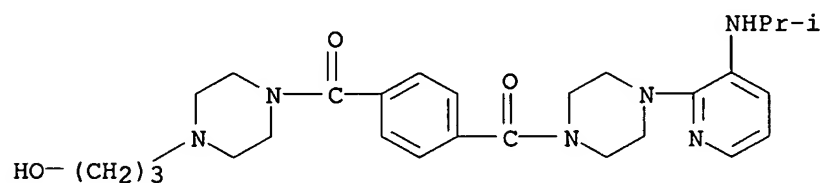
RN 216759-27-2 CAPLUS

CN Piperazine, 1-cyclopentyl-4-[4-[[4-[3-[(1-methylethyl)amino]-2-pyridinyl]-1-piperazinyl]carbonyl]benzoyl]- (9CI) (CA INDEX NAME)



RN 216759-29-4 CAPLUS

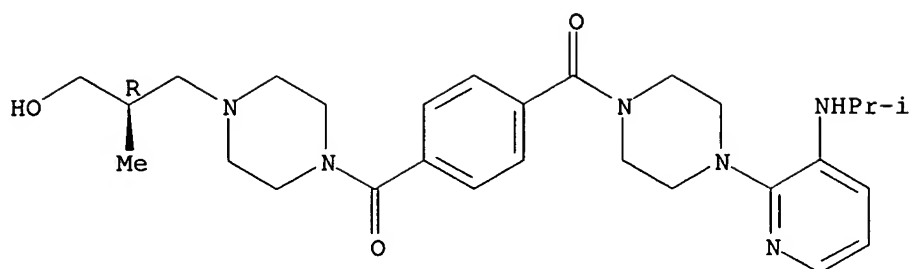
CN 1-Piperazinepropanol, 4-[[4-[[4-[3-[(1-methylethyl)amino]-2-pyridinyl]-1-piperazinyl]carbonyl]benzoyl]- (9CI) (CA INDEX NAME)



RN 216759-30-7 CAPLUS

CN 1-Piperazinepropanol,  $\beta$ -methyl-4-[[4-[[4-[3-[(1-methylethyl)amino]-2-pyridinyl]-1-piperazinyl]carbonyl]benzoyl]-, ( $\beta$ R)- (9CI) (CA INDEX NAME)

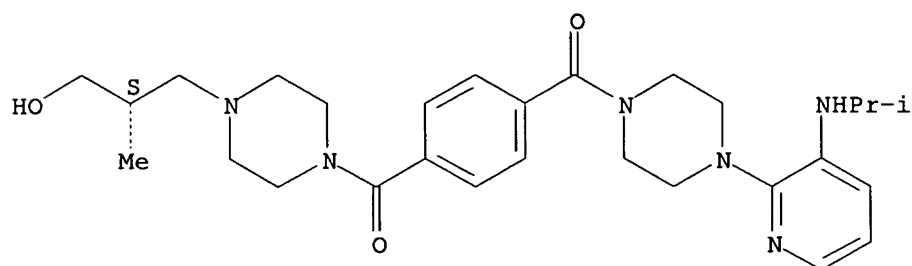
Absolute stereochemistry.



RN 216759-31-8 CAPLUS

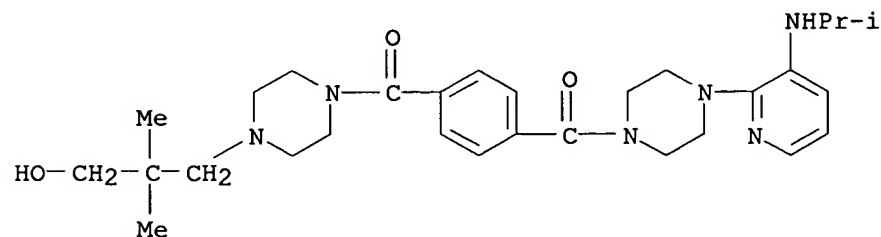
CN 1-Piperazinepropanol,  $\beta$ -methyl-4-[4-[[4-[3-[(1-methylethyl)amino]-2-pyridinyl]-1-piperazinyl]carbonyl]benzoyl]-, (BS)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



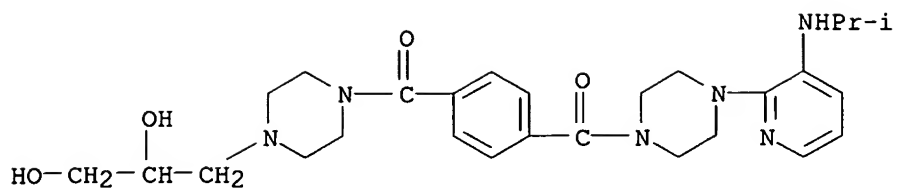
RN 216759-32-9 CAPLUS

1-Piperazinepropanol,  $\beta,\beta$ -dimethyl-4-[4-[[4-[3-[(1-methylethyl)amino]-2-pyridinyl]-1-piperazinyl]carbonyl]benzoyl]- (9CI)  
(CA INDEX NAME)



RN 216759-33-0 CAPLUS

CN 1-Piperazinepropanol,  $\beta$ -hydroxy-4-[4-[4-[3-[(1-methylethyl)amino]-2-pyridinyl]-1-piperazinyl]carbonyl]benzoyl)- (9CI) (CA INDEX NAME)



REFERENCE COUNT:

8

THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS  
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

ANSWER 35 OF 50 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1999:64808 CAPLUS

DOCUMENT NUMBER: 130:139499

TITLE: Preparation and formulation of partially hydrogenated staurosporine derivatives for use as isoenzyme PKC $\alpha$  inhibitors and anticancer agents

INVENTOR(S): Zimmermann, Jurg

PATENT ASSIGNEE(S): Novartis A.-G., Switz.; Novartis-Erfindungen  
Verwaltungsgesellschaft m.b.H.

SOURCE: PCT Int. Appl., 82 pp.

CODEN: PIXXD2

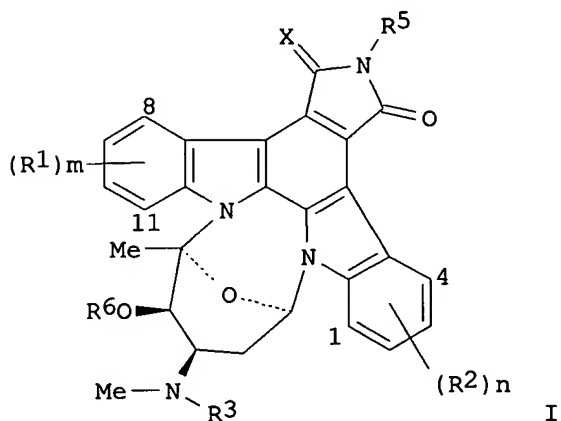
DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

**PATENT INFORMATION:**

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9902532	A2	19990121	WO 1998-EP4141	19980703
WO 9902532	A3	19990401		
W:	AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, GW, HR, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, CM,			
RW:	GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG			
AU 9888562	A1	19990208	AU 1998-88562	19980703
ZA 9805919	A	19990113	ZA 1998-5919	19980706
PRIORITY APPLN. INFO.:			CH 1997-1646	A 19970707
			CH 1997-2145	A 19970911
			WO 1998-EP4141	W 19980703
OTHER SOURCE(S):	MARPAT	130:139499		
GI				



AB Staurosporine derivs. I [R1, R2 = OH, CN, NO2, SH, NH2, alkyl, halogen,

alkyloxy, alkylthio, acyloxy, etc.; R3 = H, alkyl, acyl, carboxy, etc.; R5 = H, aliphatic, alicyclic, heterocyclic, etc.; R6 = H, alkyl; m, n = 0 - 4; X = H2, O, H and alkoxy; C1-C4 and/or C8-C11 unsatd.] were prepared for use as isoenzyme PKC $\alpha$  inhibitors and antitumor agents. Thus, 1,2,3,4-tetrahydrostaurosporine derivative I [R1 = R2 = R5 = H, R6 = Me, R3 = 4-(4-methylpiperazin-1-ylmethyl)benzoyl, X = H2, C1-C4 unsatd.] was prepared via Pd/C catalyzed hydrogenation of staurosporine, N-benzoylation with 4-(chloromethyl)benzoyl chloride, and amination with N-methylpiperazine. The prepared compds. were tested for isoenzyme PKC $\alpha$  inhibiting activity and inhibition of growth of T24 bladder carcinoma cells.

IT **220038-00-6P**

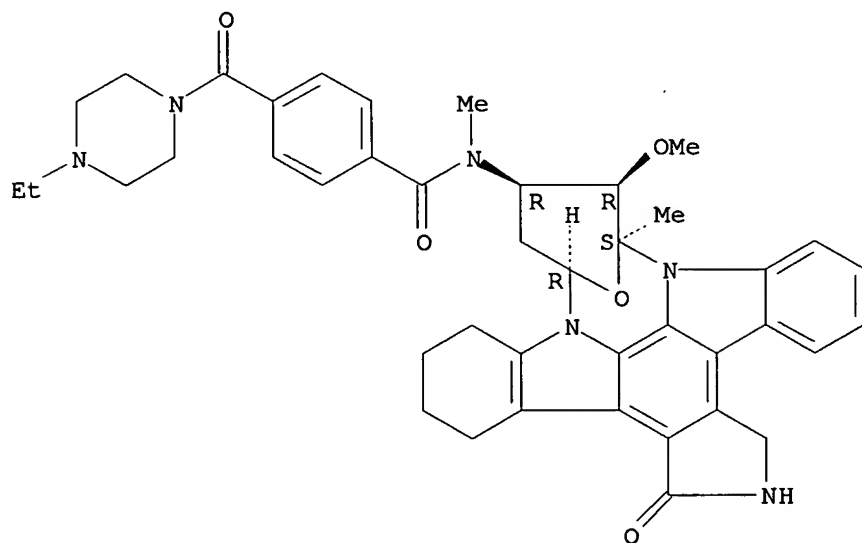
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation and formulation of partially hydrogenated staurosporine derivs. for use as isoenzyme PKC $\alpha$  inhibitors and anticancer agents)

RN 220038-00-6 CAPLUS

CN Benzamide, N-[(9S,10R,11R,13R)-2,3,10,11,12,13,15,16,17,18-decahydro-10-methoxy-9-methyl-1-oxo-9,13-epoxy-1H,9H-diindolo[1,2,3-gh:3',2',1'-lm]pyrrolo[3,4-j][1,7]benzodiazonin-11-yl]-4-[(4-ethyl-1-piperazinyl)carbonyl]-N-methyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



16 ANSWER 36 OF 50 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1998:793131 CAPLUS

DOCUMENT NUMBER: 130:38401

TITLE: Preparation of terephthalic pyridylpiperazides as viral reverse transcriptase inhibitors

INVENTOR(S): Yoon, Sung Joon; Chung, Yong Ho; Lee, Sang Wook; Sim, Hyeong Su; Park, Yong Kyun; Kim, Jong Woo; Huh, Yong; Yoon, Jae In; Park, Sang Jin

PATENT ASSIGNEE(S): Dong Wha Pharm. Ind. Co. Ltd., S. Korea

SOURCE: PCT Int. Appl., 80 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9854140	A1	19981203	WO 1997-KR183	19970930
W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, HU, ID, IL, IS, JP, KE, KG, KP, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
AU 9744733	A1	19981230	AU 1997-44733	19970930
AU 731638	B2	20010405		
CN 1254334	A	20000524	CN 1997-182212	19970930
PRIORITY APPLN. INFO.:			KR 1997-20957	A 19970527
			KR 1997-20958	A 19970527
			KR 1997-23289	A 19970605
			KR 1997-36589	A 19970731
			WO 1997-KR183	W 19970930

OTHER SOURCE(S): MARPAT 130:38401

AB R3NHZ1Z2COZ3CONR1R2 (Z1 = pyridine-3,2-diyl, Z2 = piperazine-4,1-diyl, and Z3 = 1,4-phenylene throughout) (I; R1,R2 = H, (hydroxy)alkyl, CH2Ph, Ph, etc.; NR1R2 = heterocyclyl; R3 = alkyl) were prepared Thus, piperazine was arylated by 2-chloro-3-nitropyridine and the product amidated by 4-(HO2C)C6H4CO2Me to give, after reduction, H2NZ1Z2COZ3CO2Me which was reductively alkylated by Me2CO and the product saponified to give Me2NHZ1Z2COZ3COR (II; R = OH). The latter was amidated by H2NCH2CH2OH to give II (R = NHCH2CH2OH). Data for biol. activity of I were given.

IT 216759-25-0P 216759-26-1P 216759-27-2P

216759-29-4P 216759-30-7P 216759-31-8P

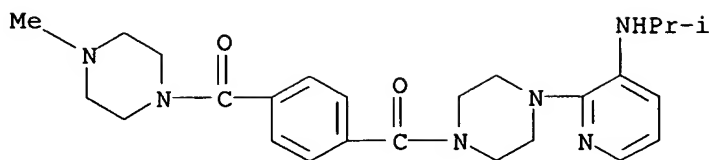
216759-32-9P 216759-33-0P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of terephthalic pyridylpiperazides as viral reverse transcriptase inhibitors)

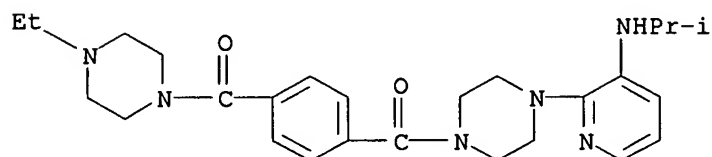
RN 216759-25-0 CAPLUS

CN Piperazine, 1-[3-[(1-methylethyl)amino]-2-pyridinyl]-4-[4-[(4-methyl-1-piperazinyl)carbonyl]benzoyl]- (9CI) (CA INDEX NAME)



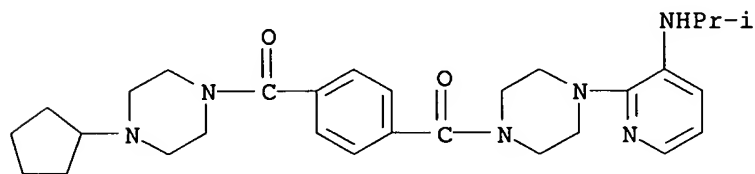
RN 216759-26-1 CAPLUS

CN Piperazine, 1-ethyl-4-[4-[[4-[3-[(1-methylethyl)amino]-2-pyridinyl]-1-piperazinyl]carbonyl]benzoyl]- (9CI) (CA INDEX NAME)



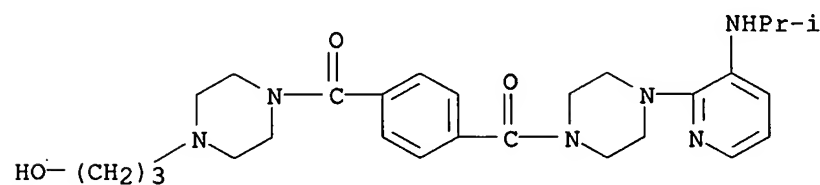
RN 216759-27-2 CAPLUS

CN Piperazine, 1-cyclopentyl-4-[4-[[4-[3-[(1-methylethyl)amino]-2-pyridinyl]-1-piperazinyl]carbonyl]benzoyl]- (9CI) (CA INDEX NAME)



RN 216759-29-4 CAPLUS

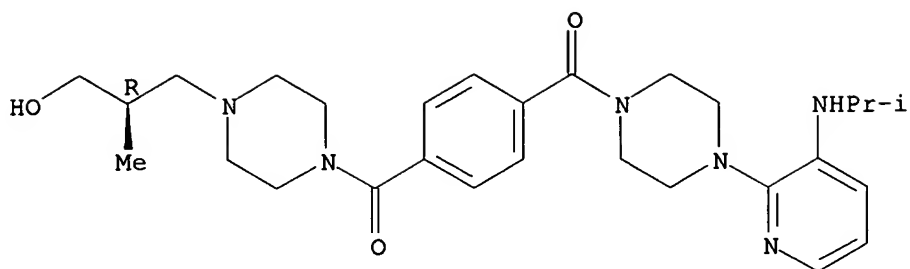
CN 1-Piperazinepropanol, 4-[4-[[4-[3-[(1-methylethyl)amino]-2-pyridinyl]-1-piperazinyl]carbonyl]benzoyl]- (9CI) (CA INDEX NAME)



RN 216759-30-7 CAPLUS

CN 1-Piperazinepropanol,  $\beta$ -methyl-4-[4-[[4-[3-[(1-methylethyl)amino]-2-pyridinyl]-1-piperazinyl]carbonyl]benzoyl]-, ( $\beta$ R)- (9CI) (CA INDEX NAME)

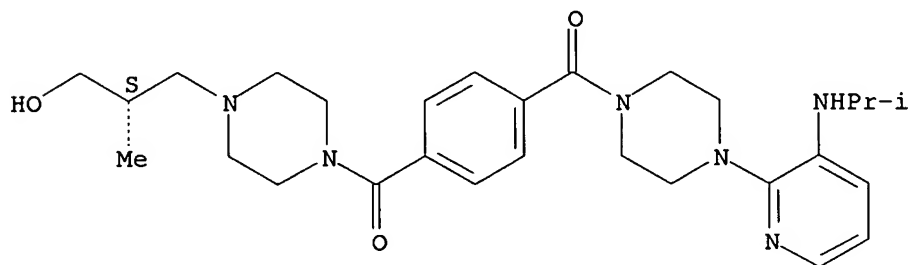
Absolute stereochemistry.



RN 216759-31-8 CAPLUS

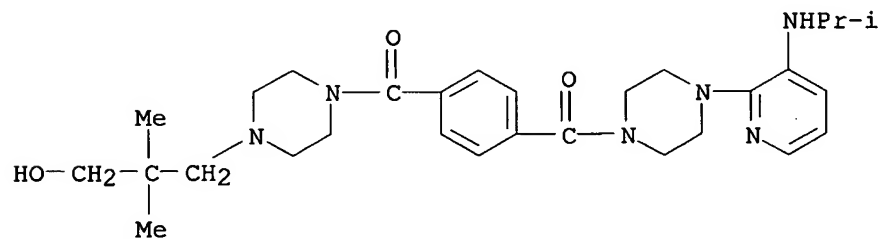
CN 1-Piperazinepropanol,  $\beta$ -methyl-4-[4-[[4-[3-[(1-methylethyl)amino]-2-pyridinyl]-1-piperazinyl]carbonyl]benzoyl]-, ( $\beta$ S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 216759-32-9 CAPLUS

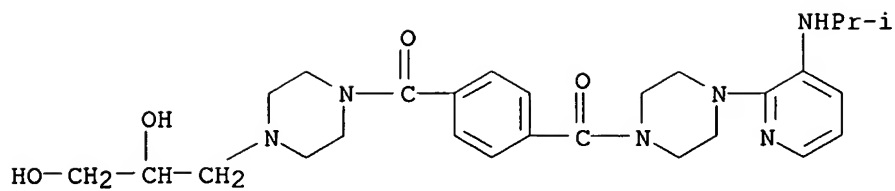
CN 1-Piperazinepropanol,  $\beta,\beta$ -dimethyl-4-[4-[[4-[3-[(1-methylethyl)amino]-2-pyridinyl]-1-piperazinyl]carbonyl]benzoyl]- (9CI) (CA INDEX NAME)



RN 216759-33-0 CAPLUS

CN 1-Piperazinepropanol,  $\beta$ -hydroxy-4-[4-[[4-[3-[(1-methylethyl)amino]-2-pyridinyl]-1-piperazinyl]carbonyl]benzoyl]- (9CI) (CA INDEX NAME)





REFERENCE COUNT:

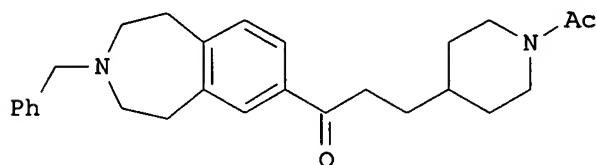
4

THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS  
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

ANSWER 37 OF 50 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1998:708810 CAPLUS  
 DOCUMENT NUMBER: 129:330744  
 TITLE: Preparation of benzazepine thermogenics  
 INVENTOR(S): Ishihara, Yuji; Fujisawa, Yukio; Furuyama, Naoki  
 PATENT ASSIGNEE(S): Takeda Chemical Industries, Ltd., Japan  
 SOURCE: PCT Int. Appl., 399 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9846590	A1	19981022	WO 1998-JP1753	19980416
W: AL, AM, AU, AZ, BA, BB, BG, BR, BY, CA, CN, CU, CZ, EE, GE, GW, HU, ID, IL, IS, KG, KR, KZ, LC, LK, LR, LT, LV, MD, MG, MK, MN, MX, NO, NZ, PL, RO, RU, SG, SI, SK, SL, TJ, TM, TR, TT, UA, US, UZ, VN, YU, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
CA 2282390	AA	19981022	CA 1998-2282390	19980416
AU 9868528	A1	19981111	AU 1998-68528	19980416
EP 975624	A1	20000202	EP 1998-914055	19980416
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
JP 11310532	A2	19991109	JP 1998-107257	19980417
US 6534496	B1	20030318	US 1999-402806	19991007
PRIORITY APPLN. INFO.:			JP 1997-100675	A 19970417
			JP 1998-41495	A 19980224
			WO 1998-JP1753	W 19980416
OTHER SOURCE(S):			MARPAT 129:330744	
GI				



II

AB The title compds. ArC(O)(CHR)<sub>n</sub>Y [I; Ar = Ph which may be substituted and/or condensed; n = 1-10; R = H, hydrocarbon group which may be substituted, which may not be the same in n occurrences; R may be bound to either Ar or a substituent on Ar; Y = (un)substituted NH<sub>2</sub>, (un)substituted nitrogen-containing saturated heterocyclic group] and their salts, useful as thermogenic, antiobesity, and lipolytic agents, or as prophylactic and/or treating drugs for obesity-associated diseases or diabetes with a reduced risk for central side effects and high universality in usage, were prepared and formulated. Thus, reaction of 3-(1-acetyl-4-piperidiny)propionyl chloride with 3-formyl-2,3,4,5-tetrahydro-1H-3-benzazepine in the presence of AlCl<sub>3</sub> in CH<sub>2</sub>Cl<sub>2</sub> followed by treatment of the resulting 3-(1-acetyl-4-piperidiny)-1-(3-formyl-2,3,4,5-tetrahydro-1H-3-benzazepin-

7-yl)-1-propanone in MeOH with concentrate HCl, and reaction of 3-(1-acetyl-4-piperidiny)-1-(2,3,4,5-tetrahydro-1H-3-benzazepin-7-yl)-1-propanone with benzyl bromide afforded the title compound II.HCl which showed cAMP concentration of 1369.1 pmol/mL at 10<sup>-5</sup> M in murine preadipocyte

line

(3T3-L1).

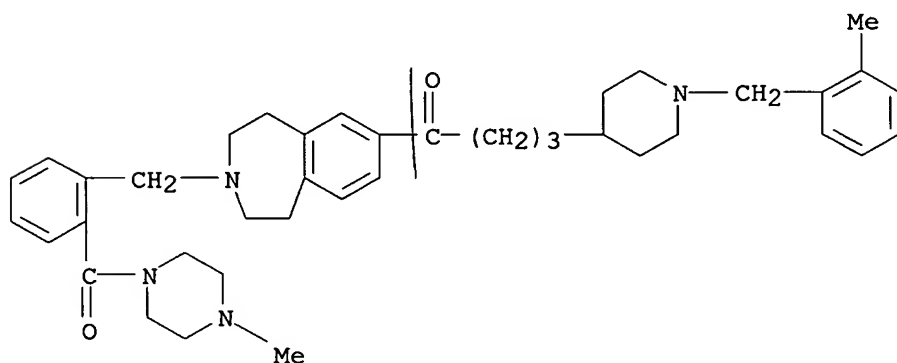
IT 215044-42-1P 215044-45-4P 215046-87-0P

215046-89-2P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
(preparation of benzazepine thermogenics)

RN 215044-42-1 CAPLUS

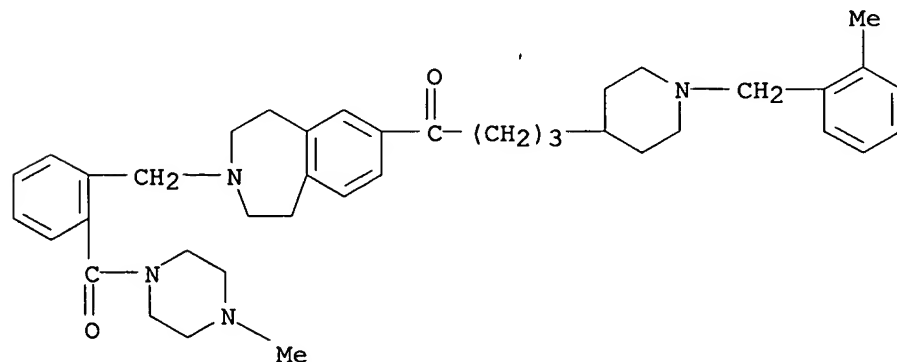
CN Piperazine, 1-methyl-4-[2-[[1,2,4,5-tetrahydro-7-[4-[1-[(2-methylphenyl)methyl]-4-piperidiny]-1-oxobutyl]-3H-3-benzazepin-3-yl]methyl]benzoyl]-, trihydrochloride (9CI) (CA INDEX NAME)



●3 HCl

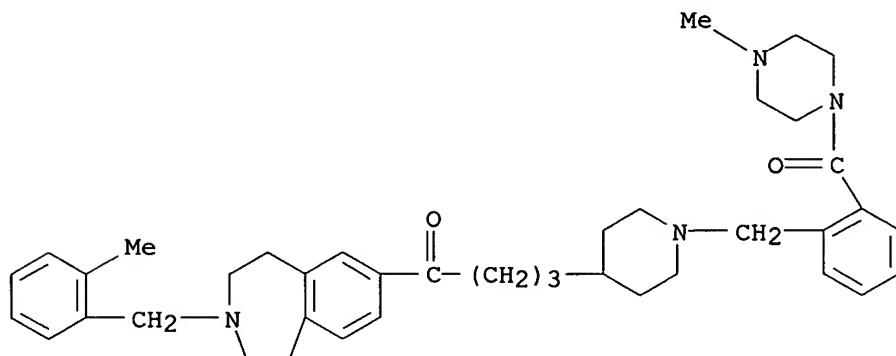
RN 215044-45-4 CAPLUS

CN Piperazine, 1-methyl-4-[2-[[1,2,4,5-tetrahydro-7-[4-[1-[(2-methylphenyl)methyl]-4-piperidiny]-1-oxobutyl]-3H-3-benzazepin-3-yl]methyl]benzoyl]- (9CI) (CA INDEX NAME)



RN 215046-87-0 CAPLUS

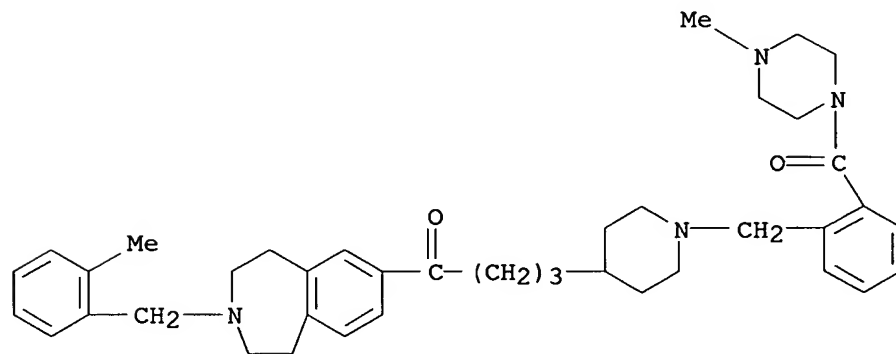
CN Piperazine, 1-methyl-4-[2-[[4-[4-oxo-4-[2,3,4,5-tetrahydro-3-[(2-methylphenyl)methyl]-1H-3-benzazepin-7-yl]butyl]-1-piperidinyl]methyl]benzoyl]-, trihydrochloride (9CI) (CA INDEX NAME)



● 3 HCl

RN 215046-89-2 CAPLUS

CN Piperazine, 1-methyl-4-[2-[[4-[4-oxo-4-[2,3,4,5-tetrahydro-3-[(2-methylphenyl)methyl]-1H-3-benzazepin-7-yl]butyl]-1-piperidinyl]methyl]benzoyl]- (9CI) (CA INDEX NAME)



REFERENCE COUNT:

7

THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

10/690,115

LE ANSWER 38 OF 50 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1997:501946 CAPLUS

DOCUMENT NUMBER: 127:199229

TITLE: Vicinal diamides as lanthanide-complexing agents with two conformational states of different dipole moments. Elements for new molecular switches

AUTHOR(S): Schneider, Hans Jorg; Kasper, Christoph; Palyulin, Vladimir; Samoshin, Vyacheslav V.

CORPORATE SOURCE: Fachrichtung Org. Chem., Universitat Saarlandes, Saarbruecken, D-66041, Germany

SOURCE: Supramolecular Chemistry (1997), 8(3), 225-229  
CODEN: SCHEER; ISSN: 1061-0278

PUBLISHER: Gordon & Breach

DOCUMENT TYPE: Journal

LANGUAGE: English

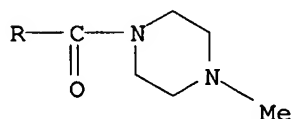
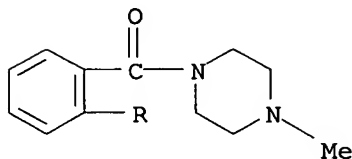
AB Vicinal diamides rest in the ground state in an anti-parallel orientation with a small dipole moment. They are able to bind metal ions like lanthanide(3+) upon which they change to a parallel orientation with high dipole moments.

IT 104560-26-1

RL: PEP (Physical, engineering or chemical process); RCT (Reactant); PROC (Process); RACT (Reactant or reagent)  
(complexation of lanthanide by vicinal diamides)

RN 104560-26-1 CAPLUS

CN Piperazine, 1,1'-(1,2-phenylenedicarbonyl)bis[4-methyl- (9CI) (CA INDEX NAME)



10/690,115

LE ANSWER 39 OF 50 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1996:279348 CAPLUS

DOCUMENT NUMBER: 125:57507

TITLE: Synthesis of an array of amides by aluminum chloride assisted cleavage of resin-bound esters

AUTHOR(S): Barn, David R.; Morphy, J. Richard; Rees, David C.

CORPORATE SOURCE: Medicinal Chem. Dep., Organon Lab. Ltd., Lanarkshire, ML1 5SH, UK

SOURCE: Tetrahedron Letters (1996), 37(18), 3213-3216

CODEN: TELEAY; ISSN: 0040-4039

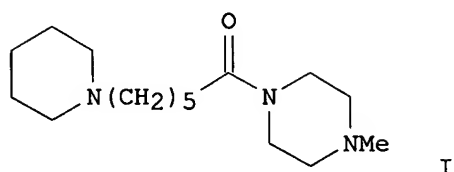
PUBLISHER: Elsevier

DOCUMENT TYPE: Journal

LANGUAGE: English

OTHER SOURCE(S): CASREACT 125:57507

GI



AB A new method for the synthesis of amino amides using Wang or Tentagel-PHB resins is described. The method uses aluminum chloride to promote the conversion of resin-bound benzylic esters to amides under ambient conditions. The reactions were monitored in real-time using <sup>13</sup>C gel phase NMR. Thus, diisopropylcarbodiimide/4-dimethylaminopyridine mediated reaction of 6-bromohexanoic acid with Wang resin in DMF gave resin-bound ester which on reaction with piperidine in DMF followed by reaction with N-methylpiperazine in the presence of AlCl<sub>3</sub> in CH<sub>2</sub>Cl<sub>2</sub> gave 45% amide I.

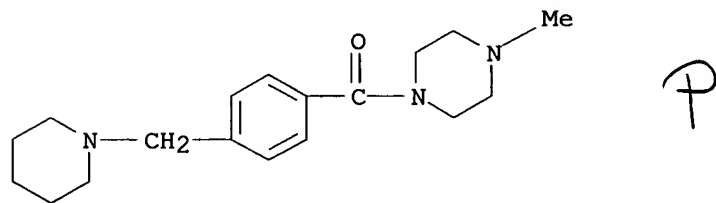
IT 177971-54-9P

RL: SPN (Synthetic preparation); PREP (Preparation)

(synthesis of array of amides by aluminum chloride assisted cleavage of resin-bound esters)

RN 177971-54-9 CAPLUS

CN Piperazine, 1-methyl-4-[4-(1-piperidinylmethyl)benzoyl]- (9CI) (CA INDEX NAME)



16 ANSWER 40 OF 50 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1994:680676 CAPLUS

DOCUMENT NUMBER: 121:280676

TITLE: Asymmetrically substituted xanthine with adenosine-antagonistic properties

INVENTOR(S): Kuefner-Muehl, Ulrike; Ensinger, Helmut; Mierau, Joachim; Kuhn, Franz Josef; Lehr, Erich; Mueller, Enzo

PATENT ASSIGNEE(S): Boehringer Ingelheim KG, Germany; Boehringer Ingelheim International GmbH

SOURCE: PCT Int. Appl., 86 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: German

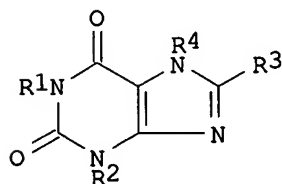
FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9403456	A1	19940217	WO 1993-EP2077	19930805
W: AU, BG, CA, CZ, FI, JP, KR, NO, NZ, PL, RU, SK, UA, US				
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, NL, PT, SE				
DE 4325254	A1	19940217	DE 1993-4325254	19930728
EP 654033	A1	19950524	EP 1993-917743	19930805
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, NL, PT, SE				
JP 08500344	T2	19960116	JP 1993-505017	19930805
AU 681348	B2	19970828	AU 1993-47071	19930805
AU 9347071	A1	19940303		
PL 176389	B1	19990531	PL 1993-307397	19930805
RU 2138500	C1	19990927	RU 1995-109100	19930805
CZ 286459	B6	20000412	CZ 1995-348	19930805
ZA 9305762	A	19940616	ZA 1993-5762	19930809
HU 65734	A2	19940728	HU 1993-2302	19930809
IL 106624	A1	19990126	IL 1993-106624	19930809
CN 1086818	A	19940518	CN 1993-109282	19930810
CN 1043348	B	19990512		
FI 9500542	A	19950208	FI 1995-542	19950208
NO 9500497	A	19950407	NO 1995-497	19950209
US 5719279	A	19980217	US 1996-661567	19960611
PRIORITY APPLN. INFO.:			DE 1992-4226371	A 19920810
			DE 1992-4238423	A 19921113
			WO 1993-EP2077	W 19930805
			US 1993-104831	B1 19930810
			US 1994-329020	B1 19941025

OTHER SOURCE(S): MARPAT 121:280676

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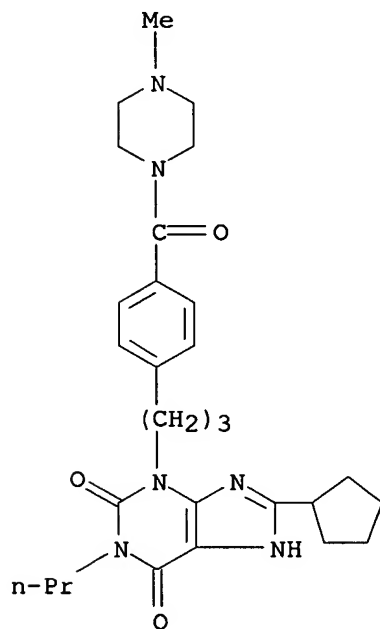
AB New xanthine derivs. I (R1 = H, C1-C6-alkyl, allyl, C3-C6-alkenyl, C3-C6-alkynyl, R2 = H, C1-C8-alkyl, aminoalkyl, etc., R3 = C3-C7-cycloalkyl, etc., R4 = H, Me, PhCH2, alkoxyalkyl, alkylthioalkyl, etc.), a process for preparing the same and their use as medicaments are disclosed, as well as their use as intermediate compds. Thus, e.g. I (R1 = Pr, R2 = 4-MeOC6H4CH2CH2, R3 = cyclopentyl, R4 = H) was prepared in 10 steps starting from amine and KOCN. Adenosine-antagonistic data of some of the compds. prepared is given.

IT **158893-15-3P**

RL: SPN (Synthetic preparation); PREP (Preparation)  
(preparation of, as adenosine antagonist)

RN 158893-15-3 CAPLUS

CN Piperazine, 1-[4-[3-(8-cyclopentyl-1,2,6,7-tetrahydro-2,6-dioxo-1-propyl-3H-purin-3-yl)propyl]benzoyl]-4-methyl- (9CI) (CA INDEX NAME)





10/690,115

~~E6~~ ANSWER 41 OF 50 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1992:571156 CAPLUS

DOCUMENT NUMBER: 117:171156

TITLE: Synthesis of a platelet antiaggregant-picotamide and its analogs

AUTHOR(S): Tong, Zeen; Chen, Wenhao; Peng, Sixun

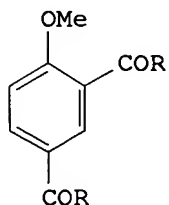
CORPORATE SOURCE: Div. Med. Chem., China Pharm. Univ., Nanjing, Peop. Rep. China

SOURCE: Zhongguo Yaoke Daxue Xuebao (1992), 23(1), 1-4  
CODEN: ZHYXE9; ISSN: 1000-5048

DOCUMENT TYPE: Journal

LANGUAGE: Chinese

GI



I

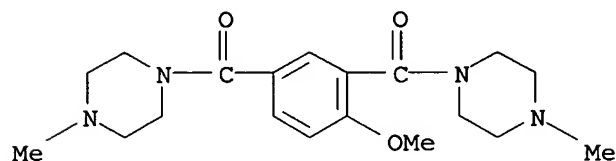
AB Title compound I (R = 3-pyridylmethylamino, PhCH<sub>2</sub>NH, 4-MeC<sub>6</sub>H<sub>4</sub>NH, PhNMe, dibenzylamino, 4-O<sub>2</sub>NC<sub>6</sub>H<sub>4</sub>NH, cyclohexylamino, pyrrolidino, piperidino, morpholino, N-methylpiperazinyl, 2-pyridylamino, etc.) were prepared in 33.0-93.5% yield by amidation of I (R = OH) with amines.

IT **143570-03-0P**

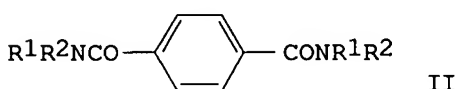
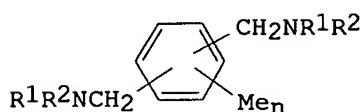
RL: SPN (Synthetic preparation); PREP (Preparation)  
(preparation of)

RN 143570-03-0 CAPLUS

CN Piperazine, 1,1'-[(4-methoxy-1,3-phenylene)dicarbonyl]bis[4-methyl- (9CI)  
(CA INDEX NAME)



~~10~~ ANSWER 42 OF 50 CAPLUS COPYRIGHT 2006 ACS on STN  
 ACCESSION NUMBER: 1988:215837 CAPLUS  
 DOCUMENT NUMBER: 108:215837  
 TITLE: Relations between chemical structure and analgesic action of some diamines and aminoethers  
 AUTHOR(S): Dobrescu, Dumitru; Iovu, Mircea; Georgescu, Cornel; Stoicescu, Vasile; Cristea, Aurelia  
 CORPORATE SOURCE: Fac. Pharm., Bucharest, Rom.  
 SOURCE: Revue Roumaine de Chimie (1987), 32(9-10), 995-1000  
 CODEN: RRCHAX; ISSN: 0035-3930  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 GI



AB The structure-analgesic activity relationships were studied by the Free-Wilson model of 54 compds. belonging to  $\alpha, \alpha'$ -diaminoxylenes (I), terephthaldiamides (II) ( $R_1R_2N$  = alkylamino or heterocyclic amine) and monoaminomethyl alkyl ethers  $R_1R_2NCH_2OR$  (III) or  $R_1R_2NCH_2OR$  (IV) where  $R$  = Ph or cycloalkyl. The analgesic activity was measured in mice and compared to that of normaphenazone. I with  $n = 4$  were more active than compds. with  $n < 4$ . A comparison of the corresponding compds. I ( $n = 0$ ) and II showed that II were more active. Alkyl ethers III attached to O were less active than IV. The most active amino groups were di-sec-butylamino, benzylpiperidino, and N-phenylpiperazino substituents.

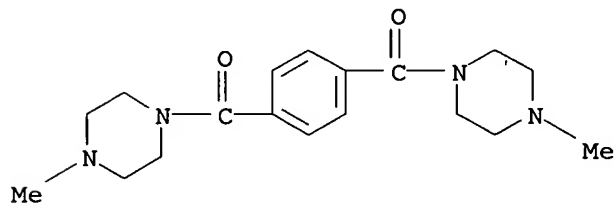
IT 104560-24-9

RL: BIOL (Biological study)

(structure-analgesic activity relationships of)

RN 104560-24-9 CAPLUS

CN Piperazine, 1,1'-(1,4-phenylenedicarbonyl)bis[4-methyl- (9CI) (CA INDEX NAME)



ANSWER 43 OF 50 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1987:166312 CAPLUS  
 DOCUMENT NUMBER: 106:166312  
 TITLE: Heat-sensitive two-color adhesive recording label  
 INVENTOR(S): Iiyama, Kiyotaka; Inaba, Norihiko  
 PATENT ASSIGNEE(S): Ricoh Co., Ltd., Japan  
 SOURCE: Ger. Offen., 59 pp.  
 CODEN: GWXXBX  
 DOCUMENT TYPE: Patent  
 LANGUAGE: German  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 3610588	A1	19861002	DE 1986-3610588	19860327
DE 3610588	C2	19880616		
JP 61222789	A2	19861003	JP 1985-64894	19850328
JP 07010620	B4	19950208		
US 4663641	A	19870505	US 1986-839931	19860317
GB 2173012	A1	19861001	GB 1986-7501	19860326
GB 2173012	B2	19890621		

PRIORITY APPLN. INFO.: JP 1985-64894 A 19850328

AB A heat-sensitive 2-color adhesive recording label giving clear color images with excellent color separation and high d. is composed of a 1st heat-sensitive high-temperature color-forming layer, a 2nd heat-sensitive low-temperature color-forming layer containing a decolorization agent, an adhesive

layer, and a strippable covering foil. The decolorization agent, which also can be in an interlayer, is a piperazine derivative or an amide derivative A

paper sheet was coated with a 1st heat-sensitive layer, a decolorization layer containing a mixture of terephthaloyldipiperidine and isophthaloyldi(cyclohexylmethylamide), a 2nd heat-sensitive color-forming layer, and a protective layer to give a material which was then coated on the backside with an adhesive layer and a strippable foil. The resultant material was then thermally recorded upon in a bar-code printer to produce a clear black image in the 2nd heat-sensitive color-forming layer and a clear orange-red image in the 1st heat-sensitive color-forming layer. The images had a sharp color separation and were stable.

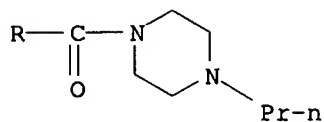
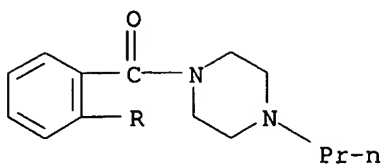
IT 104541-45-9 104560-24-9 104560-25-0  
 104560-26-1 104560-30-7 104560-31-8

RL: USES (Uses)

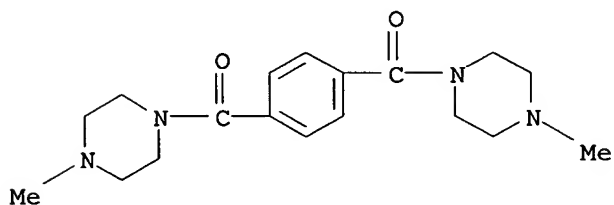
(heat-sensitive two-color adhesive recording label with interlayer containing, as decolorization agent)

RN 104541-45-9 CAPLUS

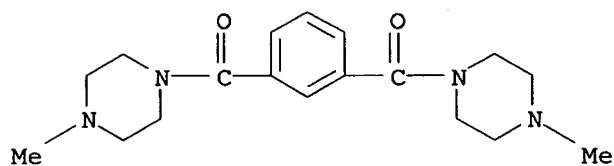
CN Piperazine, 1,1'-(1,2-phenylenedicarbonyl)bis[4-propyl- (9CI) (CA INDEX NAME)



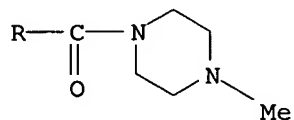
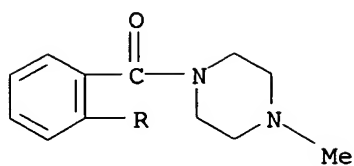
RN 104560-24-9 CAPLUS  
CN Piperazine, 1,1'-(1,4-phenylenedicarbonyl)bis[4-methyl- (9CI) (CA INDEX NAME)



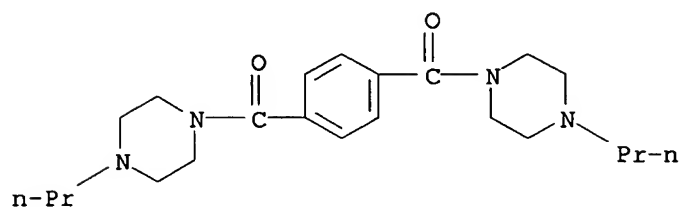
RN 104560-25-0 CAPLUS  
CN Piperazine, 1,1'-(1,3-phenylenedicarbonyl)bis[4-methyl- (9CI) (CA INDEX NAME)



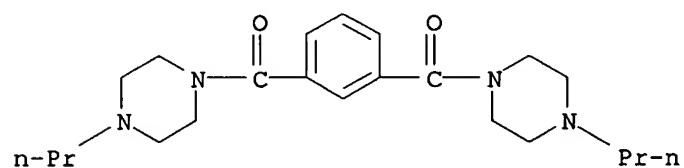
RN 104560-26-1 CAPLUS  
CN Piperazine, 1,1'-(1,2-phenylenedicarbonyl)bis[4-methyl- (9CI) (CA INDEX NAME)



RN 104560-30-7 CAPLUS  
CN Piperazine, 1,1'-(1,4-phenylenedicarbonyl)bis[4-propyl- (9CI) (CA INDEX NAME)



RN 104560-31-8 CAPLUS  
CN Piperazine, 1,1'-(1,3-phenylenedicarbonyl)bis[4-propyl- (9CI) (CA INDEX NAME)

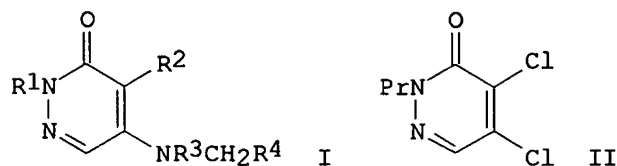


L6 ANSWER 44 OF 50 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1986:626609 CAPLUS  
 DOCUMENT NUMBER: 105:226609  
 TITLE: 3(2H)-Pyridazinones and antiallergic agents containing them  
 INVENTOR(S): Mutsukado, Motoo; Tanikawa, Keizo; Shikada, Kenichi; Sakoda, Ryoza  
 PATENT ASSIGNEE(S): Nissan Chemical Industries, Ltd., Japan  
 SOURCE: Eur. Pat. Appl., 126 pp.  
 CODEN: EPXXDW  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 186817	A1	19860709	EP 1985-115655	19851209
EP 186817	B1	19890802		
R: AT, BE, CH, DE, FR, GB, IT, LI, LU, NL, SE				
JP 61267560	A2	19861127	JP 1985-276436	19851209
JP 06041455	B4	19940601		
AT 45150	E	19890815	AT 1985-115655	19851209
CA 1265798	A1	19900213	CA 1985-497201	19851209
HU 45732	A2	19880829	HU 1986-2854	19860710
HU 196378	B	19881128		
HU 60252	A2	19920828	HU 1986-2860	19860710
HU 208678	B	19931228		
ZA 8605384	A	19870325	ZA 1986-5384	19860718
SU 1468415	A3	19890323	SU 1986-4027913	19860807
DD 251973	A5	19871202	DD 1986-293856	19860826
US 5098900	A	19920324	US 1988-180599	19880411
PRIORITY APPLN. INFO.:			JP 1984-260342	A 19841210
			EP 1985-115655	A 19851209
			US 1985-806812	B1 19851210

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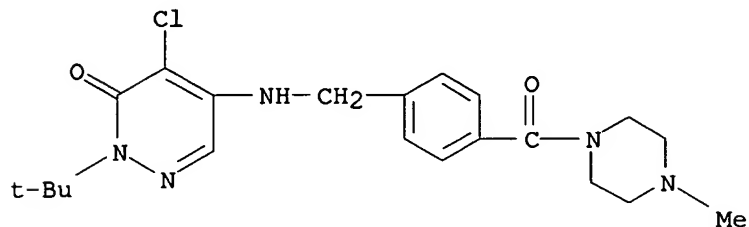
AB The title compds. [I; R<sub>1</sub> = alkyl; R<sub>2</sub> = H, alkyl, Cl, Br; R<sub>3</sub> = H, alkyl; R<sub>4</sub> = (un)substituted Ph] were prepared as antiallergics. Thus, 3,4-(MeO)<sub>2</sub>C<sub>6</sub>H<sub>3</sub>CHO was reductively aminated with (HONH<sub>2</sub>)<sub>2</sub>.H<sub>2</sub>SO<sub>4</sub> and Raney Ni to give 3,4-(MeO)<sub>2</sub>C<sub>6</sub>H<sub>3</sub>CH<sub>2</sub>NH<sub>2</sub>. This was condensed with dichloropyridazine II to give I ]R<sub>1</sub> = Pr, R<sub>2</sub> = Cl, R<sub>3</sub> = H, R<sub>4</sub> = 3,4-(MeO)<sub>2</sub>C<sub>6</sub>H<sub>3</sub>] (III). In isolated guinea pig trachea 5 + 10<sup>-5</sup> g III/mL gave 100% inhibition of leukotriene C<sub>4</sub>-induced contraction. Tablets of 50 mg were prepared from a formulation comprising I 10, lactose 20, starch 4, starch for paste 1, Ca carboxymethylcellulose 7, and Mg stearate 0.1 g.

IT 104565-13-1P 104565-14-2P

RL: SPN (Synthetic preparation); PREP (Preparation)  
(preparation of, as antiallergic)

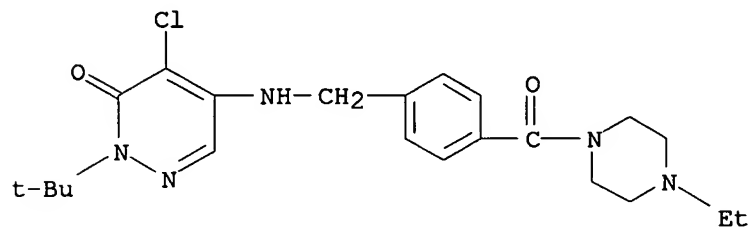
RN 104565-13-1 CAPLUS

CN Piperazine, 1-[4-[[[5-chloro-1-(1,1-dimethylethyl)-1,6-dihydro-6-oxo-4-pyridazinyl]amino]methyl]benzoyl]-4-methyl- (9CI) (CA INDEX NAME)



RN 104565-14-2 CAPLUS

CN Piperazine, 1-[4-[[[5-chloro-1-(1,1-dimethylethyl)-1,6-dihydro-6-oxo-4-pyridazinyl]amino]methyl]benzoyl]-4-ethyl- (9CI) (CA INDEX NAME)



~~16~~ ANSWER 45 OF 50 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1986:562351 CAPLUS  
 DOCUMENT NUMBER: 105:162351  
 TITLE: Heat-sensitive two-color recording material  
 INVENTOR(S): Inaba, Norihoko; Iiyama, Kiyotaka  
 PATENT ASSIGNEE(S): Ricoh Co., Ltd., Japan  
 SOURCE: Ger. Offen., 38 pp.  
 CODEN: GWXXBX  
 DOCUMENT TYPE: Patent  
 LANGUAGE: German  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 3540627	A1	19860522	DE 1985-3540627	19851115
DE 3540627	C2	19881006		
JP 61120792	A2	19860607	JP 1984-241333	19841115
JP 06030955	B4	19940427		
JP 61152484	A2	19860711	JP 1984-273816	19841227
JP 06030956	B4	19940427		
GB 2167201	A1	19860521	GB 1985-28253	19851115
GB 2167201	B2	19880810		
US 4613878	A	19860923	US 1985-798420	19851115
PRIORITY APPLN. INFO.:			JP 1984-241333	A 19841115
			JP 1984-273816	A 19841227

OTHER SOURCE(S): MARPAT 105:162351

AB Heat-sensitive 2-color recording materials giving sharp color images with good color separation and high d., which do not fade in the course of time, are composed of a support, a 1st heat-sensitive color-forming layer, and a 2nd heat-sensitive color-forming layer containing a basic leuco dye and a color developer and having a lower color-forming temperature than that of the 1st layer. The 2nd heat-sensitive layer may also contain a decolorizing agent or the decolorizing agent may be contained in an intermediate layer. Thus, a paper support was coated with a mixture containing 10 parts of a dispersion containing 3-diethylamino-7-chlorofluoran 20, 10% aqueous hydroxyethylcellulose 20, and water 60 parts, 60 parts of a dispersion containing Bisphenol A 12, ethylenebis(stearamide) 6, CaCO<sub>3</sub> 9, 10% aqueous poly(vinyl alc.) 30, and water 43 parts, and 30 parts water to give a 1st heat-sensitive red-forming layer; a mixture containing N,N'-isophthaloylbiscaprolactam 20, 10% aqueous poly(vinyl alc.) 20, and water 60 parts to give a decolorizing layer; and a mixture containing 10 parts of a dispersion containing 3-(N-ethyl-N-amylamino)-6-methyl-7-anilino-fluoran 20, 10% aqueous hydroxyethyl cellulose 20, and water 60 parts, 40 parts of a dispersion containing 3,3-dichlorophenylthiourea 12, stearamide 6, CaCO<sub>3</sub> 12, 10% aqueous poly(vinyl alc.) 30, and water 40 parts to give a 2nd heat-sensitive black-forming layer. The resultant material was recorded on at 1.0 mJ and 3.0 mJ/point to show a red image d. of 1.01 in the 1st layer and a black image d. of 1.10 in the 2nd layer and excellent color separation

IT 104541-45-9

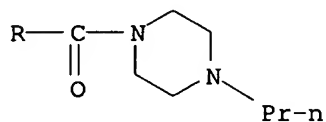
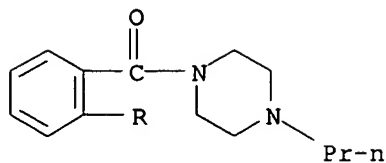
RL: USES (Uses)

(thermal two-color recording material with decolorizing layer containing, for improved color separation)

RN 104541-45-9 CAPLUS

CN Piperazine, 1,1'-(1,2-phenylenedicarbonyl)bis[4-propyl- (9CI) (CA INDEX NAME)





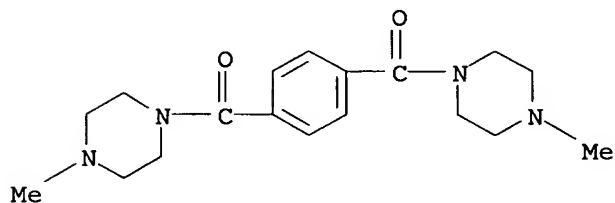
IT 104560-24-9 104560-25-0 104560-26-1  
104560-30-7 104560-31-8

RL: USES (Uses)

(two-color thermal recording material containing)

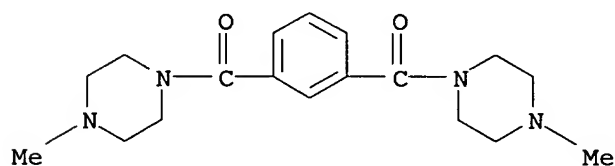
RN 104560-24-9 CAPLUS

CN Piperazine, 1,1'-(1,4-phenylenedicarbonyl)bis[4-methyl- (9CI) (CA INDEX NAME)]



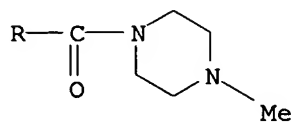
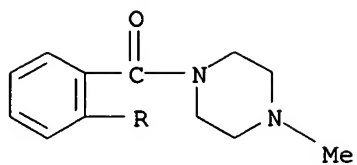
RN 104560-25-0 CAPLUS

CN Piperazine, 1,1'-(1,3-phenylenedicarbonyl)bis[4-methyl- (9CI) (CA INDEX NAME)]

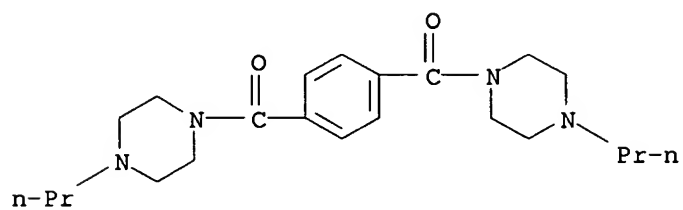


RN 104560-26-1 CAPLUS

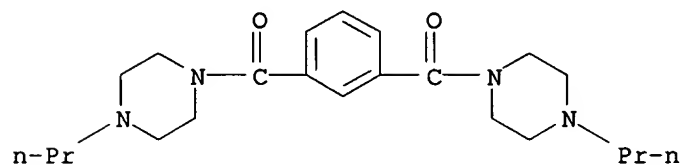
CN Piperazine, 1,1'-(1,2-phenylenedicarbonyl)bis[4-methyl- (9CI) (CA INDEX NAME)]



RN 104560-30-7 CAPLUS  
CN Piperazine, 1,1'-(1,4-phenylenedicarbonyl)bis[4-propyl- (9CI) (CA INDEX NAME)



RN 104560-31-8 CAPLUS  
CN Piperazine, 1,1'-(1,3-phenylenedicarbonyl)bis[4-propyl- (9CI) (CA INDEX NAME)



LE ANSWER 46 OF 50 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1985:195055 CAPLUS

DOCUMENT NUMBER: 102:195055

TITLE: Light-sensitive photographic material containing immobile linked-donor-acceptor compounds

INVENTOR(S): Komaya, Koichi; Noguchi, Yasuhiro; Toriuchi, Masaharu

PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan

SOURCE: Ger. Offen., 85 pp.

CODEN: GWXXBX

DOCUMENT TYPE: Patent

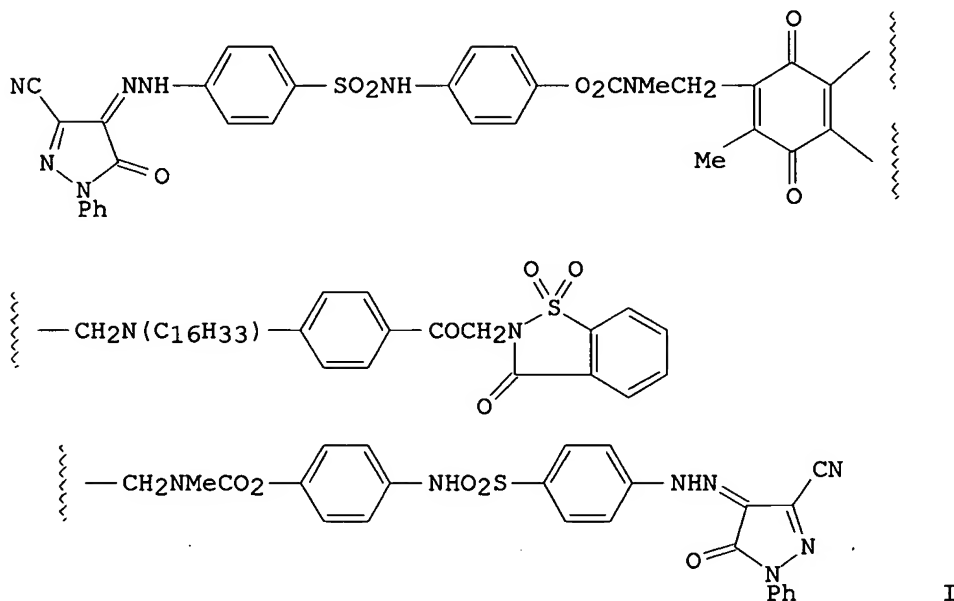
LANGUAGE: German

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 3413096	A1	19841011	DE 1984-3413096	19840406
JP 59185333	A2	19841020	JP 1983-60289	19830406
JP 02034374	B4	19900802		
GB 2140927	A1	19841205	GB 1984-8910	19840406
GB 2140927	B2	19860903		
US 4551423	A	19851105	US 1984-597623	19840406
PRIORITY APPLN. INFO.:			JP 1983-60289	A 19830406

GI



AB Immobile linked-donor-acceptor compds., which release a diffusible dye or its precursor by a redox reaction, are described for use in preparing pos. diffusion-transfer materials. Thus, a photosensitive material was prepared by coating a poly(ethylene terephthalate) support with an image acceptor layer, a white reflection layer, a light screening layer, a gelatin-I layer ( $5.0 + 10^{-4}$  mol/m<sup>2</sup>), a gelatin-Ag(Br,I) emulsion layer, and a gelatin protective layer. This material was then exposed, combined with a polymer-coated top sheet and processed to give a yellow image with a Dmax

of 1.84 and a Dmin of 0.24 vs. 1.6 and 0.23, resp., for a control containing an electron donor precursor and a color forming material.

IT **96144-90-0**

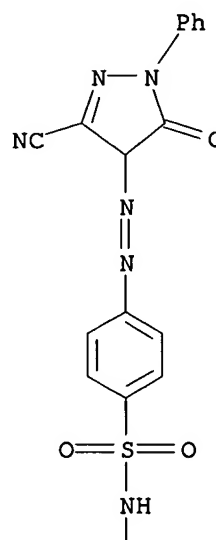
RL: USES (Uses)

(photog. immobile linked-donor-acceptor compound, for color materials)

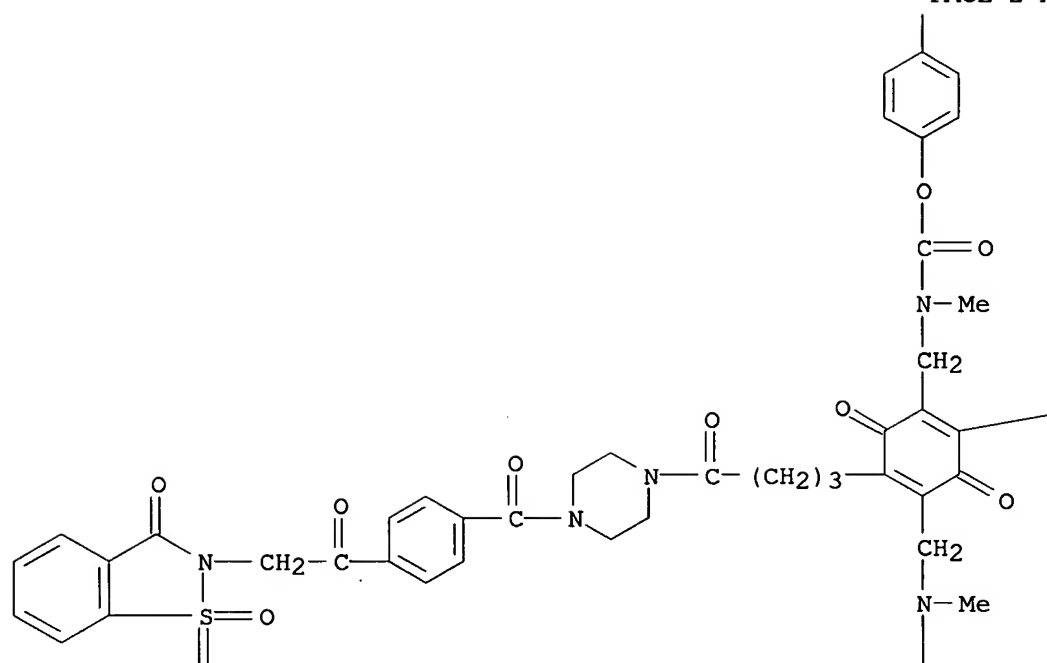
RN 96144-90-0 CAPLUS

CN Carbamic acid, [[5-[4-[4-[4-[(1,1-dioxido-3-oxo-1,2-benzisothiazol-2(3H)-yl)acetyl]benzoyl]-1-piperazinyl]-4-oxobutyl]-2-dodecyl-3,6-dioxo-1,4-cyclohexadiene-1,4-diyl]bis(methylene)]bis[methyl-, bis[4-[[[4-[(3-cyano-4,5-dihydro-5-oxo-1-phenyl-1H-pyrazol-4-yl)azo]phenyl]sulfonyl]amino]phenyl] ester (9CI) (CA INDEX NAME)

PAGE 1-A



PAGE 2-A

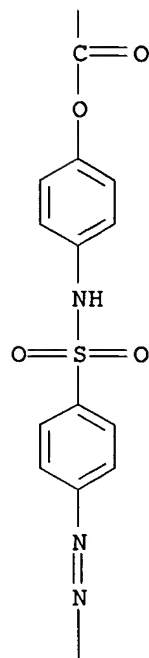


PAGE 2-B

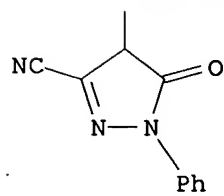
— (CH<sub>2</sub>)<sub>11</sub> — Me



PAGE 3-A



PAGE 4-A



10/690,115

~~LG~~ ANSWER 47 OF 50 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1981:515322 CAPLUS

DOCUMENT NUMBER: 95:115322

TITLE: Carboxylic acid derivatives and medicaments containing them

INVENTOR(S): Griss, Gerhart; Sauter, Robert; Grell, Wolfgang; Hurnaus, Rudolf; Rupprecht, Eckhard; Kaubisch, Nikolaus; Kaehling, Joachim; Eisele, Bernhard; Piper, Helmut; Noll, Klaus

PATENT ASSIGNEE(S): Thomae, Dr. Karl, G.m.b.H., Fed. Rep. Ger.

SOURCE: Eur. Pat. Appl., 271 pp.

CODEN: EPXXDW

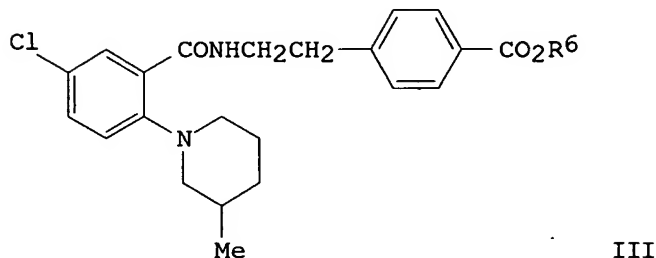
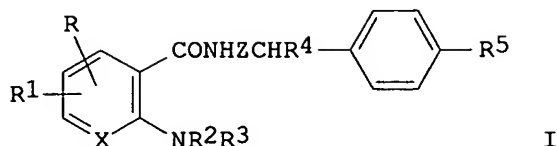
DOCUMENT TYPE: Patent

LANGUAGE: German

FAMILY ACC. NUM. COUNT: 3

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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EP 23569	A1	19810211	EP 1980-103670	19800628
EP 23569	B1	19830622		
R: AT, BE, CH, DE, FR, GB, IT, LU, NL, SE				
DE 2928352	A1	19810115	DE 1979-2928352	19790713
DE 2949259	A1	19810611	DE 1979-2949259	19791207
DE 3016650	A1	19811105	DE 1980-3016650	19800430
DE 3016651	A1	19811105	DE 1980-3016651	19800430
EP 63826	A2	19821103	EP 1982-104991	19800628
EP 63826	A3	19821229		
EP 63826	B1	19841205		
R: AT, BE, CH, DE, FR, GB, IT, LI, LU, NL, SE				
AT 3862	E	19830715	AT 1980-103670	19800628
AT 10632	E	19841215	AT 1982-104991	19800628
AU 8060362	A1	19810115	AU 1980-60362	19800711
AU 535924	B2	19840412		
HU 27876	O	19831128	HU 1983-1085	19800711
HU 186675	B	19850930	HU 1980-1085	19800711
ES 501882	A1	19820301	ES 1981-501882	19810505
ES 501883	A1	19820301	ES 1981-501883	19810505
ES 501884	A1	19820301	ES 1981-501884	19810505
NO 8403735	A	19810114	NO 1984-3735	19840919
PRIORITY APPLN. INFO.:			DE 1979-2928352	A 19790713
			DE 1979-2949259	A 19791207
			DE 1980-3016650	A 19800430
			DE 1980-3016651	A 19800430
			EP 1980-103670	A 19800628
			EP 1982-104991	19800628
OTHER SOURCE(S):		CASREACT 95:115322; MARPAT 95:115322		
GI				



AB Carboxamides I [R = H, Cl, Br, C4-7 cyclic alkylenimins; R1 = H, F, Cl, Br, C1-6 alkyl or alkoxy, Ph-substituted C1-3 alkoxy, OH, NO2, NH2, cyano, CO2H, alkanoylamine, alkoxy carbonyl, di-C1-3-alkylamidodisulfonyl; R2, R3 independently = C1-7 alkyl C3-7 alkenyl or cycloalkyl, Ph-substituted C1-3 alkyl, Ph, adamantyl; NR2R3 = C4-6 cyclic (un)substituted alkylenimins optionally with CH2 replaced by O, S, CO, S(O), S(O2), C7-10 azabicycloalkyl, alkyl-substituted piperidino, C6-9 1,4-dioxo-8-azaspiroalkyl, (CH2)nN (n = 3-5, 7-12); R4 = H, C1-3 alkyl; R5 = H, halo, NO2, NH2, cyano, CHO, CH2OH, CH2CH2CO2H, (esterified) CO2H, substituted Me, Ac, Et, H2NCO, piperidino-, morpholino-, thiomorpholino-, or N-alkylpiperazinocarbonyl; X = N or CH; Z = O, an imino group, or a methylene group optionally subst. with 1 or 2 C1-C3 alkyl groups] and their physiol. tolerable salts, useful as hypoglycemics, anticholesteremics, and hypolipemics (data tabulated), were prepared by numerous methods. Refluxing 2,5-Cl(O2N)C6H3CO2H and 2-methylpiperidine in EtOH gave 85% 2-(3-methylpiperidino)-5-nitrobenzoic acid which was hydrogenated over Pd/C to 75% the 5-amino analog II. Gattermann reaction of II gave 47% 5-chloro-3-(2-methylpiperidino) benzoic acid which reacted with N,N'-carbonyldiimidazole in THF to give the imidazolide. Treating this with 4-(H2NCH2CH2)C6H4CO2Me gave 51% benzamide III (R6 = Me), saponification of which gave 83% III (R6 = H). At 5 mg/kg (rats), III (R = H) lowered blood sugar 44, 42, 38, and 35% after 1, 2, 3, and 4 h, resp.

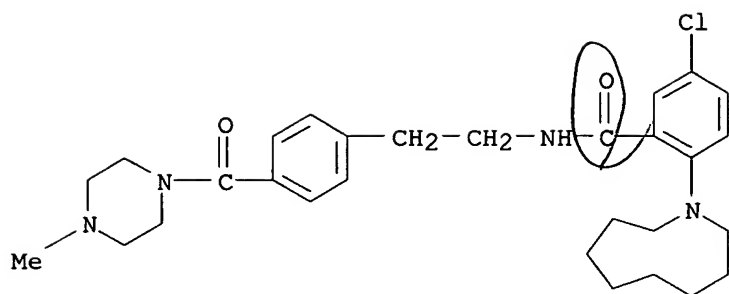
IT 78254-12-3P

RL: SPN (Synthetic preparation); PREP (Preparation)  
(preparation of)

RN 78254-12-3 CAPLUS

CN Benzamide, 5-chloro-N-[2-[4-[(4-methyl-1-piperazinyl)carbonyl]phenyl]ethyl]-2-(octahydro-1H-azonin-1-yl)- (9CI) (CA INDEX NAME)

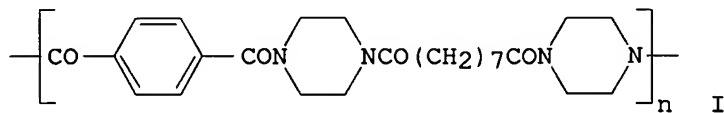




10/690,115

~~13~~ ANSWER 48 OF 50 CAPLUS COPYRIGHT 2006 ACS on STN  
ACCESSION NUMBER: 1979:611422 CAPLUS  
DOCUMENT NUMBER: 91:211422  
TITLE: Piperazinecarboxamides  
INVENTOR(S): Noguchi, Tamiharu; Kamiyama, Takahisa; Matsumura, Masahiro  
PATENT ASSIGNEE(S): Matsushita Electric Works, Ltd., Japan  
SOURCE: Jpn. Tokkyo Koho, 4 pp.  
CODEN: JAXXAD  
DOCUMENT TYPE: Patent  
LANGUAGE: Japanese  
FAMILY ACC. NUM. COUNT: 2  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 54014158	B4	19790605	JP 1971-61239	19710812
JP 48026893	A2	19730409	JP 1971-61239	19710812
PRIORITY APPLN. INFO.:			JP 1971-61239	19710812
GI				

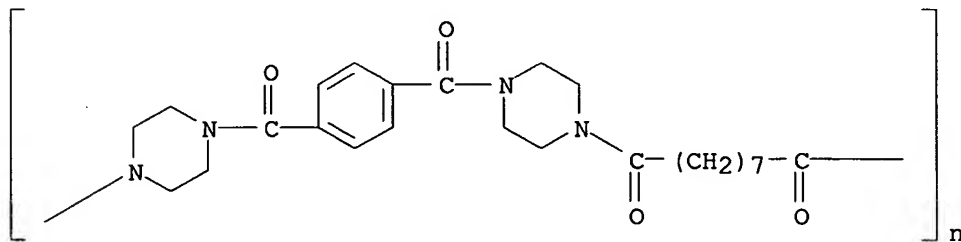


AB The title compound I (n = undefined) was prepared in 65% yield by treatment of piperazine with  $\text{ClCO}(\text{CH}_2)_7\text{COCl}$  in  $\text{Me}_2\text{CO}$  containing  $\text{Et}_3\text{N}$  to give a bispiperazine derivative which was treated with terephthaloyl chloride. Addnl. obtained were the isophthaloyl derivs.

IT 71602-86-3P 71602-87-4P 71602-88-5P  
RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)  
(preparation and viscosity of)

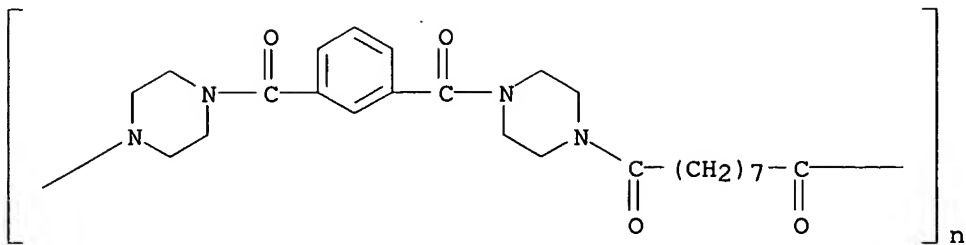
RN 71602-86-3 CAPLUS

CN Poly[1,4-piperazinediylcarbonyl-1,4-phenylenecarbonyl-1,4-piperazinediyl(1,9-dioxo-1,9-nonanediy)] (9CI) (CA INDEX NAME)



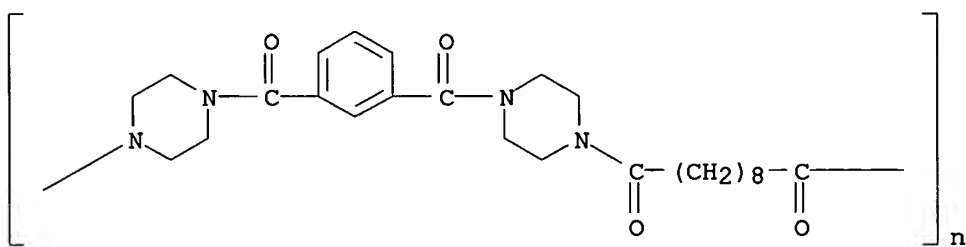
RN 71602-87-4 CAPLUS

CN Poly[1,4-piperazinediylcarbonyl-1,3-phenylenecarbonyl-1,4-piperazinediyl(1,9-dioxo-1,9-nonanediy)] (9CI) (CA INDEX NAME)



RN 71602-88-5 CAPLUS

CN Poly[1,4-piperazinediylcarbonyl-1,3-phenylenecarbonyl-1,4-piperazinediyl(1,10-dioxo-1,10-decanediyl)] (9CI) (CA INDEX NAME)



10 ANSWER 49 OF 50 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1968:2876 CAPLUS

DOCUMENT NUMBER: 68:2876

TITLE: Reaction of dicarboxylic acid dichlorides and 1-alkyl-2,5-dioxopiperazines

AUTHOR(S): Augustin, Manfred; Gruenwald, Gerold

CORPORATE SOURCE: Martin-Luther-Univ., Halle-Wittenberg, Fed. Rep. Ger.

SOURCE: Zeitschrift fuer Chemie (1967), 7(10), 389

CODEN: ZECEAL; ISSN: 0044-2402

DOCUMENT TYPE: Journal

LANGUAGE: German

GI For diagram(s), see printed CA Issue.

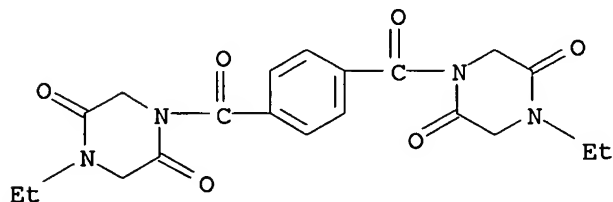
AB 1-(R-Substituted)-2,5-dioxopiperazines (I) were prepared by cyclization of diglycine derivs. by the method of Foye and Kay (CA 55: 4522f). The following I were prepared (R and m.p. given): Pr, 168-9°; Bu, 176-7°; iso-Bu, 189-90°; MeCHPh, 157-8°. Treatment of I with dicarboxylic acid dichlorides led to II. The following II were prepared [X = CO(CH<sub>2</sub>)<sub>4</sub>CO] (R and m.p. given): Me, 183-4°; Et, 180-1°; Pr, 171-2°; Bu, 180-1°; iso-Bu, 194-6°; C<sub>6</sub>H<sub>11</sub>, 248-9°; PhCH<sub>2</sub>, 176-7°; where [X = CO(CH<sub>2</sub>)<sub>8</sub>CO] (R and m.p. given): Me, 176-8°; Et, 161-2°; iso-Bu, 158-9°; Bu, 171-2°; PhCH<sub>2</sub>, 160-2°; where (X = p-COC<sub>6</sub>H<sub>4</sub>CO) (R and m.p. given): Me, 280-1°; Et, 243-5°; PhCH<sub>2</sub>, 242-3°; C<sub>6</sub>H<sub>11</sub>, 255-7°; where [X = p-CO(C<sub>6</sub>H<sub>4</sub>)<sub>2</sub>CO] (R and m.p. given): Et, 287-9°; iso-Bu, 257-9°; PhCH<sub>2</sub>, 247-9°; C<sub>6</sub>H<sub>11</sub>, 285-7°; and where [X = p-CO(C<sub>6</sub>H<sub>4</sub>)<sub>3</sub>CO] (R and m.p. given): Et, 270-2°; iso-Bu, 285-7°; PhCH<sub>2</sub>, 310-12°; Ph, 292-4°.

IT 16350-73-5P 16350-88-2P 16416-86-7P

RL: SPN (Synthetic preparation); PREP (Preparation)  
(preparation of)

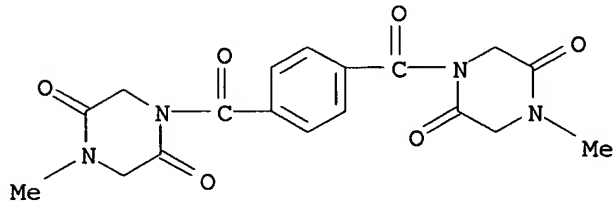
RN 16350-73-5 CAPLUS

CN 2,5-Piperazinedione, 1,1'-terephthaloylbis[4-ethyl- (8CI) (CA INDEX NAME)



RN 16350-88-2 CAPLUS

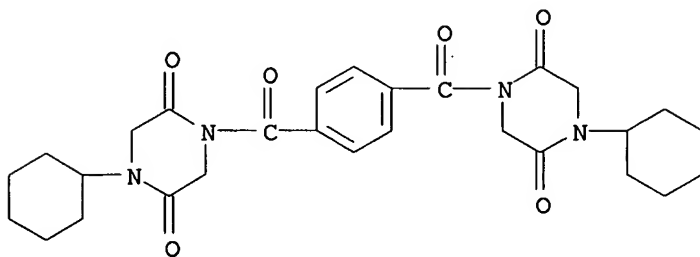
CN 2,5-Piperazinedione, 1,1'-terephthaloylbis[4-methyl- (8CI) (CA INDEX NAME)



10/690,115

RN 16416-86-7 CAPLUS

CN 2,5-Piperazinedione, 1,1'-terephthaloylbis[4-cyclohexyl- (8CI) (CA INDEX NAME)



10/690,115

LS ANSWER 50 OF 50 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1962:456631 CAPLUS

DOCUMENT NUMBER: 57:56631

ORIGINAL REFERENCE NO.: 57:11316b-d

TITLE: Biophysical studies with synthetic lecithin as a means to new way of chemotherapy

AUTHOR(S): Hirt, R; Berchtold, R.

CORPORATE SOURCE: Forschungsinstitut Dr. A. Wander A-G., Bern, Switz.

SOURCE: Experientia (1961), 17, 418-20

CODEN: EXPEAM; ISSN: 0014-4754

DOCUMENT TYPE: Journal

LANGUAGE: Unavailable

GI For diagram(s), see printed CA Issue.

AB cf. CA 54, 24914h. Lecithin has been assumed by act as a "carrier" in ion transport across the lipid part of the cell wall. By using a simple model, lecithin dissolved in CCl<sub>4</sub> was shown to transfer an anion (tropaolin) (I) from an aqueous solution to a lipid phase. Polybasic materials,

such as protamin and polymyxin, promoted the transport rote the lipid phase. A number of poly-basic materials were synthesized and studied. Of especially interest were those with the structure I. Cations which promoted the

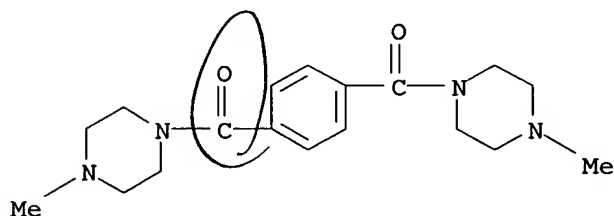
transfer of I interfered with the transfer of tryptaflavine (a cation). Some of the recently synthesized materials prolonged the life of mice with leukemia

IT **94997-85-0**, Piperazine, 1,1'-terephthaloylbis[4-methyl-, dihydrochloride

(transfer across cell wall of, lecithin in)

RN 94997-85-0 CAPLUS

CN Piperazine, 1,1'-terephthaloylbis[4-methyl-, dihydrochloride (7CI) (CA INDEX NAME)



●2 HCl

10/690,115

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(FILE 'HOME' ENTERED AT 13:02:09 ON 16 MAY 2006)

FILE 'REGISTRY' ENTERED AT 13:02:18 ON 16 MAY 2006

L1               STRUCTURE UPLOADED  
L2               27 S L1  
L3               STRUCTURE UPLOADED  
L4               7 S L3  
L5               251 S L3 SSS FUL

FILE 'CAPLUS' ENTERED AT 13:34:48 ON 16 MAY 2006

L6               50 S L5  
L7               1 S 140:391298/DN  
                  SELECT RN L7 1-

FILE 'REGISTRY' ENTERED AT 13:37:47 ON 16 MAY 2006

L8               88 S E1-88  
L9               50 S L5 AND L8  
L10              38 S L8 NOT L9  
L11              11 S L10 AND NRS>1  
L12              27 S L10 NOT L11

=>

7 no further species  
from applicants  
these are all intermediates